

MODEL

VFL701A

HDTV LCD Color Viewfinder

Operation Manual

English

Ikegami

Safety Precautions

Please follow the safety instructions below:

Before you use this unit, be sure to familiarize yourself with this “Safety Precautions” and the “Operation Manual” to use the unit in the proper manner.



After reading these documents, be sure to keep them in a safe place for your reference whenever the information is required.

Concerning Pictographic Symbols

The pictographic symbols contained in this “Safety Precautions” and placed on the units are provided by using various pictographs to ensure that you use this unit in the safe manner and to protect yourself or other persons from any hazards and to prevent any damages occurring from this unit.



The pictographic indications and their meanings are given below. Please thoroughly understand these indications and their meanings before using this unit.

Please understand that there may be some pictographic symbols that may not apply to the unit you purchased.

	Warning	This symbol indicates a content that any erroneous handling of this unit committed by ignoring this symbol may cause an accident resulting in death or serious injury.
	Caution	This symbol indicates a content that any erroneous handling of this unit committed by ignoring this symbol may cause an accident resulting in serious injury or in property loss or damage.





(Note) The Δ symbol indicates a content to call for the user’s attention.

Example of Symbols





	The ○ symbol indicates that the action is prohibited. In the diagram or in its vicinity, the concrete contents of prohibition is illustrated. (In the diagrams at left, it is a caution against disassembly of the unit.)
	The ● symbol indicated that the action must be carried out in a coercive manner. In the diagram, the concrete content of caution is illustrated. (In the diagrams at left, the power plug must be pulled out.)

Warning










When you use the product:

	Do not place any container containing water or any liquid or small metallic pieces on the unit! Spilt liquid entering inside the unit may cause a fire or an electric shock accident.
	Do not use the unit by applying any voltage other than the specified voltage! Application of an unspecified voltage to the unit may cause a fire or an electric shock accident.
	Do not allow any metallic or combustible material to enter or be dropped into the unit from an opening! This may cause a fire or an electric shock accident.
	Do not make any alterations to this unit! This may cause a fire or an electric shock accident.

When you install the product:





	Do not install this unit on an unstable position! By doing so, the unit may be dropped or fall down, causing a personal injury.
	Do not use the unit by applying any voltage other than the specified voltage! Application of an unspecified voltage to the unit may cause a fire or an electric shock accident.
	Be sure to employ a specialized engineering constructor to install the unit in place! This unit must be securely installed in place by using the specified method. Otherwise, it may be dropped or fall down, causing a fire, an electric shock, or a personal injury. If the unit is to be installed on the wall or on the ceiling, be sure to employ a specialized engineering constructor for the work.
	Do not make any alterations to this unit! This may cause a fire or an electric shock accident.

When a trouble has occurred:


 	If an abnormal condition should occur, indicated by smoke, strange odor, or noise, be sure to turn off the power switch and unplug the power plug from the outlet! If you keep using the unit as is, a fire or an electric shock accident may occur. Make sure that the smoke has gone out and contact our sales agent or the sales person in charge.
 	If water or any foreign object has entered inside the unit, turn off the power switch and unplug the power plug from the outlet! If you keep using the unit as is, a fire or an electric shock accident may occur. Contact our sales agent or the sales person in charge.
 	If the unit is dropped down or its case is broken, turn off the power switch and unplug the power plug from the outlet! If you keep using the unit as is, a fire or an electric shock accident may occur. Contact our sales agent or the sales person in charge.
 	If this unit should go out of order, turn off the power switch and unplug the power plug from the outlet! If you keep using the unit as is, a fire or an electric shock accident may occur. Contact our sales agent or the sales person in charge.
	Do not use any damaged (with the core wire exposed or broken) power cord! If you keep using the unit as is, a fire or an electric shock accident may occur. Contact our sales agent or the sales person in charge.

Caution

When you use the product:

	Do not place any heavy object on this unit! By doing so, the unit may lose the balance and fall down or be dropped down, causing personal injury.
	Do not get on or sit on this unit or the carrying case! The unit may be broken or fall down, resulting in personal injury.
	Before moving the unit, be sure to turn off the power switch and unplug the power plug from the outlet and disconnect the connecting cables between devices! If you fail to do so, the power cord may be damaged, causing a fire or an electric shock accident.
	If the unit is not to be used for a long time, be sure to unplug the power plug from the outlet for safety. Failure to do so may cause a fire.

When you install the product:

	Do not block the ventilation holes of this unit! Blocking the ventilation hole may cause heat to build up inside the unit, causing a fire. Do not use the unit in the following manner: <ul style="list-style-type: none">• Putting the unit upside down; toppling it over sideways; or inverting it.• Pushing unit onto a narrow place with poor ventilation.• Placing the unit on a soft material such as carpet.• Covering the unit with a piece of table cloth, etc.
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To Use the Product Proficiently

When you use the product:

<ul style="list-style-type: none">• When using the unit at a watery location such as near a bath or poolside, do not allow water to enter this unit or the cables. The water that has entered the unit or the cables may cause an electric accident. Please be especially careful when you use it when it is raining or snowing; near the beach; or in the kitchen.• If thunder is heard, be sure to use the unit by considering the operating environment and the situation. If required, interrupt the use of the unit, and keep off the unit, or else you may receive an electric shock.• Do not connect any device to an AC outlet with a power rating (W) exceeding the rating allowed for the outlet. Be sure to check the power rating value indicated near the AC outlet or the Instruction Manual, or the Operation Manual.• Do not use the power cord or connecting cables by forcefully bending (or twisting or pulling) them. By doing so, the insulation of the cord or cables may be damaged, causing an electric shock accident to occur.

When you install the product:

<ul style="list-style-type: none">• Install the unit by keeping it away from a location exposed to excessive humidity or dust, oily smoke, or steam. Installation of the unit on such a location may cause an electric shock. Do not place the unit near a cooking table or a humidifier.• Make sure that the unit is securely protected from falling by a sudden earthquake or a shock. Be sure to carry out a falling prevention measure for safety to ensure that no personal injury will occur by falling of this unit.
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Concerning Maintenance of the Product:

<ul style="list-style-type: none">• For safety, be sure to turn off the power switch and unplug the power plug from the outlet before carrying out the maintenance of this unit. Failure to do so may cause an electric shock.• To ensure that the unit will maintain its performance in a stable manner for a long time, it is recommended that a "Periodic Inspection" should be carried out. Please consult with the sales person in charge for Periodic Inspections.• This unit contains some high voltage sections inside. Any inspection, maintenance or repair work of this unit must be carried out by a knowledgeable expert of this type of product, otherwise an electric shock accident may occur.
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Precautions for Use

Read this document carefully and take precautions regarding the following issues to ensure the safe use of this Viewfinder.

1. Use of a power supply other than the specified supply (DC) is strictly forbidden.

2. Do not apply any shock on the view finder.

Take necessary precautions against shock, as glass materials are used inside Liquid Crystal Display (LCD) panel.

3. Don't apply strong external force against the screen of the viewfinder.

Don not press the screen strongly. Be careful not to apply strong external force to the screen of the viewfinder.

The screen may be damaged, causing a trouble.

4. Avoid using or storing the unit at following locations:

Locations with temperatures outside the specified range

In the open air environment, necessary precautions must be taken against radiation as heat may build up inside the unit by direct sunlight, even if the surrounding temperature may be within the specified range. (Be sure to protect the unit from direct sunlight.)

Make sure that the exhaust and the intake ports on the rear of the Viewfinder is never blocked. Check the exhaust port in particular to confirm that it is not blocked by the black-out curtain and the like.

Rainy, Snowy, and Excessively Humid Locations

May cause an electric leakage or malfunction of the unit.

5. Be careful of operation at low temperature

Keep in mind that the function of the backlight will be lower and the life will become short at low temperature. It is recommendable to use the unit at normal temperature.

6. Avoid direct sunlight to the screen of the viewfinder

Keep in mind that there is a possibility of spoiling the display performance when the screen of the viewfinder is exposed to the direct sunlight for a long period of time.

7. Precaution regarding the LCD panel

Avoid directly touching the surface of the LCD panel as much as possible. For cleaning the surface, use a piece of dry and soft cloth to wipe off the dirt without harshly rubbing the surface. Do not use any solvent such as thinner or benzene.

8. Precaution against a long time operation and display

When a liquid crystal panel displays the fixed bright image, still image and so on for a long time continuously or is used continuously in high-temperature and high-humidity environment, an afterimage, a brightness drop, a screen burning, a stain, a line, a change of color and so on may occur as the structural feature of a LCD panel.

Please avoid the continuous long time display of an especially bright image and fixed patterns such as marker, WFM and VSC and the continuous use in the sealed place which has a high-temperature and high-humidity environment and in the vicinity of outlet for an air conditioning equipment.

The long time continuous display of such an image and use in such an environment hasten a secular change of an LCD panel.

It is recommended that a fixed bright image and a still image are not displayed continuously for a long time and that the brightness level is made lower. And when

the equipment is not used, it is recommended to cut the power supply of it.

(An afterimage phenomenon may be eliminated gradually by changing an image on the screen.)

9. Precautions against dew condensation

If the unit is used in an environment exposed to sudden temperature changes, dew condensation may occur on the panel surface or inside the unit. Precautions must be taken as operating the unit while condensation is remaining may cause deterioration of the display quality or malfunction of the unit. If dew condensation should occur, do not turn on the power before the dew condensation is eliminated.

10. Do not touch crystalline liquid leaked from the screen of the viewfinder.

When the screen of the viewfinder is accidentally broken and the liquid (crystalline liquid) leaks, do not touch it with your mouth, do not inhale or do not get it to your skin.

If the crystalline liquid gets in your eye or mouth, rinse it immediately with water. If your skin or clothes are stained with it, wipe off with alcohol etc. immediately and wash in cold water with soap.

If left stained, your skin or clothes may be damaged.

If it gets in your eye or mouth, rinse it immediately with water and receive medical treatment from a doctor.

11. Avoid use or storage of the unit in a corrosive gas environment.

Use or storage of this product at a location or the vicinity here corrosive gas including sulfur dioxide, hydrogen sulfide gas, or ammonia gas is generated will not only significantly reduce the service life of the product but also may cause malfunction or an electric leakage. Also, avoid using the unit in an environment exposed to the strong salt winds.

12. When storing the viewfinder for a long period of time, do so in a cool, dark place at constant temperature and humidity.

13. Do not disassembly and remodel.

Do not disassemble and remodel the viewfinder, otherwise causing a trouble or damage.

14. Do not use this product for a space apparatus, a nuclear energy controlling device, or a medical instrument involved with human life.

Concerning the Quality of the LCD Panel

An extremely high precision technology is used to produce the LCD panel built in this product, providing 99.99% or higher effective pixels. Please understand, however, that there may be missing pixels or always illuminating pixels at a rate of 0.01% or lower.

Warranty

In case the product should malfunction in the course of normal operations within two years from the date of delivery, the product will be repaired free of charge. However, any repair for the following cases has to be paid even within the warranty period:

1. Any malfunction or damage that has occurred due to one of the following causes:
 - An improper use
 - A repair or an alteration carried out by the customer
 - Transportation, movement, or falling that has occurred after purchase of the product
 - An external factor including an extraordinary natural phenomenon or application of abnormal voltages
2. Aged deterioration of OLED /LCD panel
(Including changes in brightness; increases of light spots or unit defects, etc.)
3. Damage, discoloration, or deterioration of the housing including the front surface of the panel
4. Accessories and fuses exchange

If it seems that the product is malfunctioning even after performing daily adjustments, indicated by a phenomenon such as no image available, please contact our sales agent or TECHNO IKEGAMI Co., Ltd.

Accessories

Be sure to check the following accessories accompanying this Viewfinder product:

1. Operation manual (1)
2. Studio hood (1)
3. VF Cable (1)
4. Camera number (1-9) plate (1)

MODEL VFL701A

HDTV LCD Color Viewfinder

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1. Outline

1-1. Outline

The VFL701A model provides the visual expression which has the high resolution and is suitable for a viewfinder which should be mounted on HD cameras by adopting the 7 type Full-HD LCD.

By utilizing all of the IKEGAMI knowhow accumulated through the CRT/LCD viewfinder productions, the product has achieved the optimum performance and comfortable user-friendliness demanded for a viewfinder.

1-2. Features

(1) 7.0 type Full-HD LCD panel

The product has the 7.0 type Full-HD LCD panel whose basic performance, providing high resolution, high brightness, wide view angles and good color reproduction capability, is excellent. The focus performance, which is rich in the accuracy, is realized by representing the image of camera on this LCD panel as efficiently as possible.

(2) Multi-format accommodation

For the broadcasting formats, the product can be accommodated with the following formats as a standard. The formats of various input signals will be automatically detected at the viewfinder's side.

1080i/60, 59.94, 50
720p / 60, 59.94, 50, 30, 29.97, 25, 24, 23.98
1080p/60, 59.94, 50, 30, 29.97, 25, 24, 23.98
1080PsF/30, 29.97, 25, 24, 23.98

(3) Various built-in markers

This unit can display 4:3, 13:9, 14:9 and 15:9 markers. The safety marker for the entire effective screen can also be set at the 1% increment within 80% to 100% range.

Various convenient 5-division and 10-division cross-hatching markers are provided abundantly as a standard for ease of location alignment.

(4) User marker display function

As user markers, 6 types of LINE or BOX markers per scene can be set at any location with any size for up to 5 scenes. This is an ideal function for positioning of camera and the like.

Switching of marker displays on various scenes can be performed instantly by assigning FUNCTION switches in accordance with the shooting situations.

Drawing difficult to perform through the switch operation can be carried out by using a commercially available USB mouse. In addition, the drawing data can be stored on a USB memory for copying onto another VFL701A unit or for managing on a PC.

* An application for the patent of this feature has already been filed.

(5) Waveform monitor/vector scope display function

The waveform monitor for luminance signals and the vector scope can be displayed. The size can be specified for 2 types: NOMAL and SMALL. The display luminance can be specified for 3 levels of brightness. Also, 3 types of waveform display positions and 2 types of display colors including GREEN and WHITE can be selected.

(6) Video Mag. (Magnification) display function

This is a function for displaying the magnified image of some preset partial area of the original image. You can set the magnification to twice, 4 times and 8 times. The visibility will become better. By using this feature, the accurate focusing operation will be possible.

(7) External memory function

Various data (for menu settings, user markers and capture images) can be stored on a USB memory for managing the data on a PC. It is also possible to copy the data onto another VFL701A model.

(8) Controlling by the USB mouse

By connecting a commercially available USB mouse to the USB (Universal Serial Bus) terminal on this unit, it is possible to carry out the menu operations by using the mouse. Also, use of a commercially available wireless mouse will allow the remote operations of the viewfinder.

(9) Updates through USB

MPU (micro-processing unit) and FPGA(field-programmable gate array) programs can be easily updated through USB.

(10) Capture function

This function allows a camera image to be instantly captured, quickly switching over the captured image with the currently photographed camera image by using the switch

or through the automatic operation (the switchover time to be specified on the MENU) for detailed comparisons and adjustments including location alignment and color adjustments at the shooting site through the use of only this viewfinder unit.

Since the captured image can be stored on a USB memory or be downloaded to the viewfinder unit, it is possible to reproduce the image at the same view angle. The data (*) can also be used on another VFL701A unit.

* An exclusive file format is used.

(11) Using the unit as a monitor

Since the product provides facilities for HD/3G-SDI input and DC input, it is possible to use the unit not only as a viewfinder but also as a VF for jib camera or as a monitor single-handedly. The R/G/Y tally control is possible through the contact points of VF cable.

(12) Picture in Picture

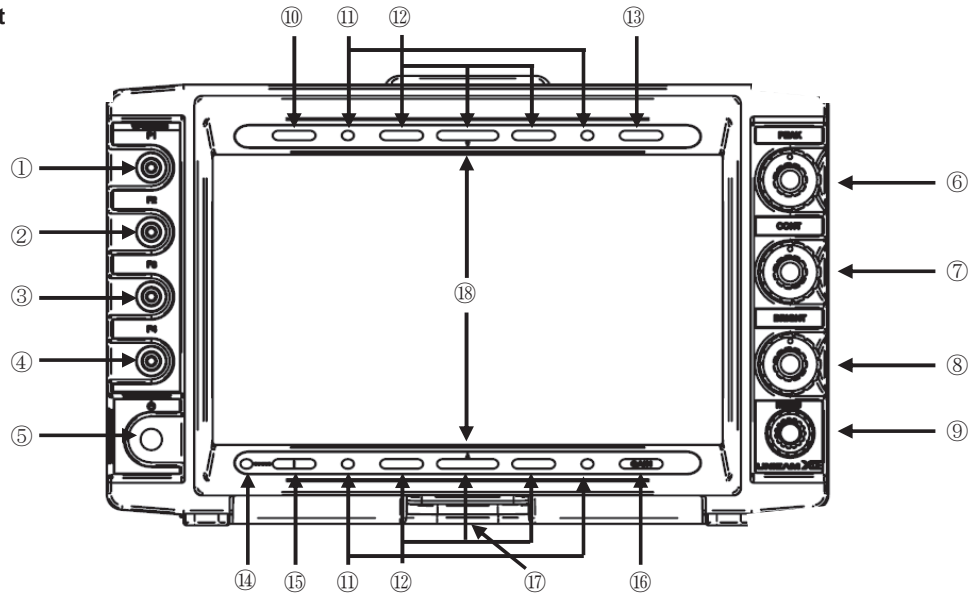
In addition to the picture of the camera, the picture of SDI INPUT can be displayed simultaneously as the sub-screen (or in the reverse).

(13) Peaking function



When there are some difference of the luminance signal component between the neighboring pixels, this function emphasizes that luminance difference (edge component). When the focusing is correct, the visibility of image will become much better by using this function. As the decision whether the focus is correct or not is possible by confirming the image on the display, the more accurate focus becomes possible. And also, as many function regarding this peaking operation, for example, the changing of the setting about the width and level of peaking, the synchronizing operation of peaking with the zooming position and the COLOR PEAKING feature are introduced into this model, this peaking function can be applied for the focusing operation in the various situation.

2. Names and Functions of Parts

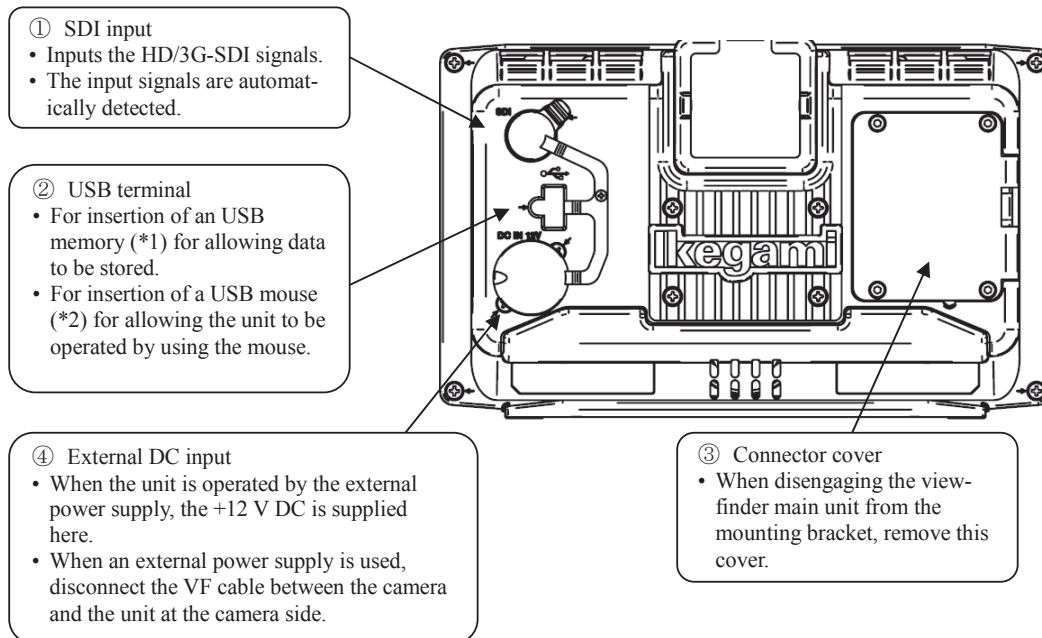
2-1. Front



No	Name	Function
①	F1 switch/LED	Switches over the function assigned by using the Menu. The LED will light up when the assigned function is turned ON.
②	F2 switch/LED	
③	F3 switch/LED	
④	F4 switch/LED	
⑤	POWER switch/LED	Turns ON/OFF the power supply to the VF and an image display. To turn OFF the power, press it for 2 seconds and the LED will go off. When an image is displayed (green LED turned ON), press the switch and the image will go OFF (green LED blinking). Press the switch in the state again, the image will be displayed (green LED turned ON). * To prevent the back light from exhausting, diligently keep the image in the OFF state when you are not viewing the image.
⑥	PEAK volume	Is also used as the switch for turning ON/OFF peaking. When it is ON (LED turns ON), it is used for adjusting the edge amount of peaking.
⑦	CONT volume	Is used also as the MANUAL/PRESET selector switch for contrast. When it is set to MANUAL (LED turned ON), it is used for adjusting the contrast.
⑧	BRIGHT volume	Is used also as the MANUAL/PRESET selector switch for brightness. When it is set to MANUAL (LED turns ON), it is used for adjusting the brightness.
⑨	MENU switch	Press the switch for long to display the MENU. Press it for long when the MENU is displayed, the display will go off.
⑩	EXT LED	When the lens extender is used, the LED will light up.
⑪	VF YELLOW TALLY LED	When the Y tally signal from the camera is received, the yellow LED will light up.

No	Name	Function
⑫	VF R/G TALLY LED	When the R tally signal / G tally signal from the camera is received, the red / green LED will light up. Display setting of the R / G tally can be carried out discretionally (Please see page E-19).
⑬	EFF LED	Lights up when the effect filter is used on the camera.
⑭	STATUS LED	 Slow blinking: Battery alarm (indicating low battery level)  Quick blinking: Battery shut down (the power coercively turned OFF 30 seconds later)
⑮	<!> LED	Lights up when AWB of the camera is OFF or when RET is ON. The function of the LED is set up according to MENU (4/10)-3 clause.
⑯	GAIN LED	Lights up when GAIN setting on the camera is not zero.
⑰	Screw hole for securing the hood	Screw hole for securing the hood in place.
⑱	▼▲(Center mark)	Indicates the center of the screen as a guide.

2-2. Rear



◆Precaution

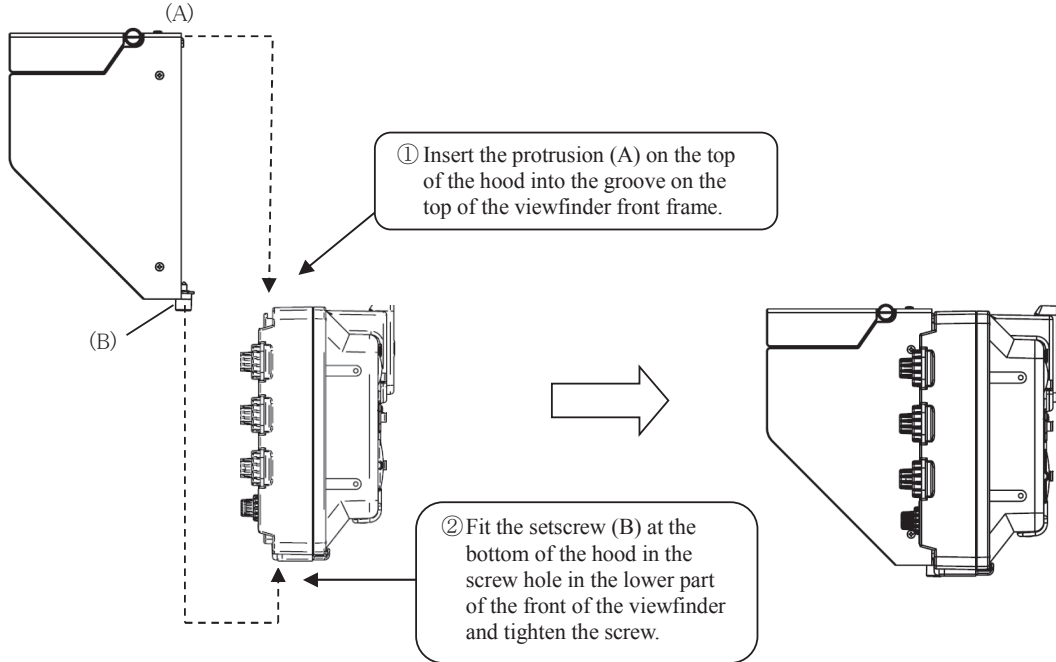
*1: USB memory

The connector cannot accept a USB memory with the security function that requires an exclusive driver.

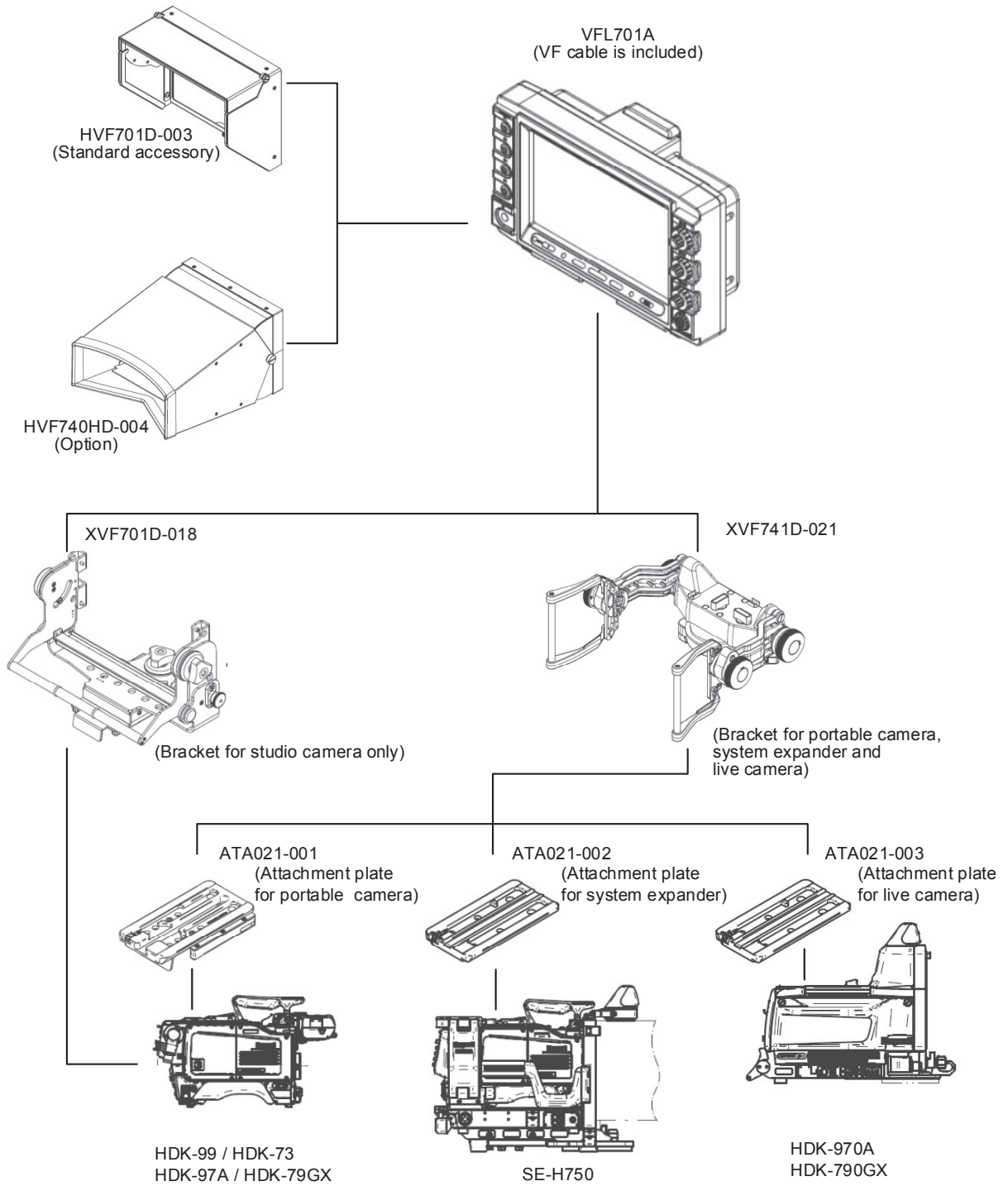
*2: USB mouse

As for USB mouse to be used, the unit can accept any general-purpose mouse compliant with the HID standard incorporated in the Windows, but not any mouse that requires a special exclusive driver.

2-3. How to install the hood

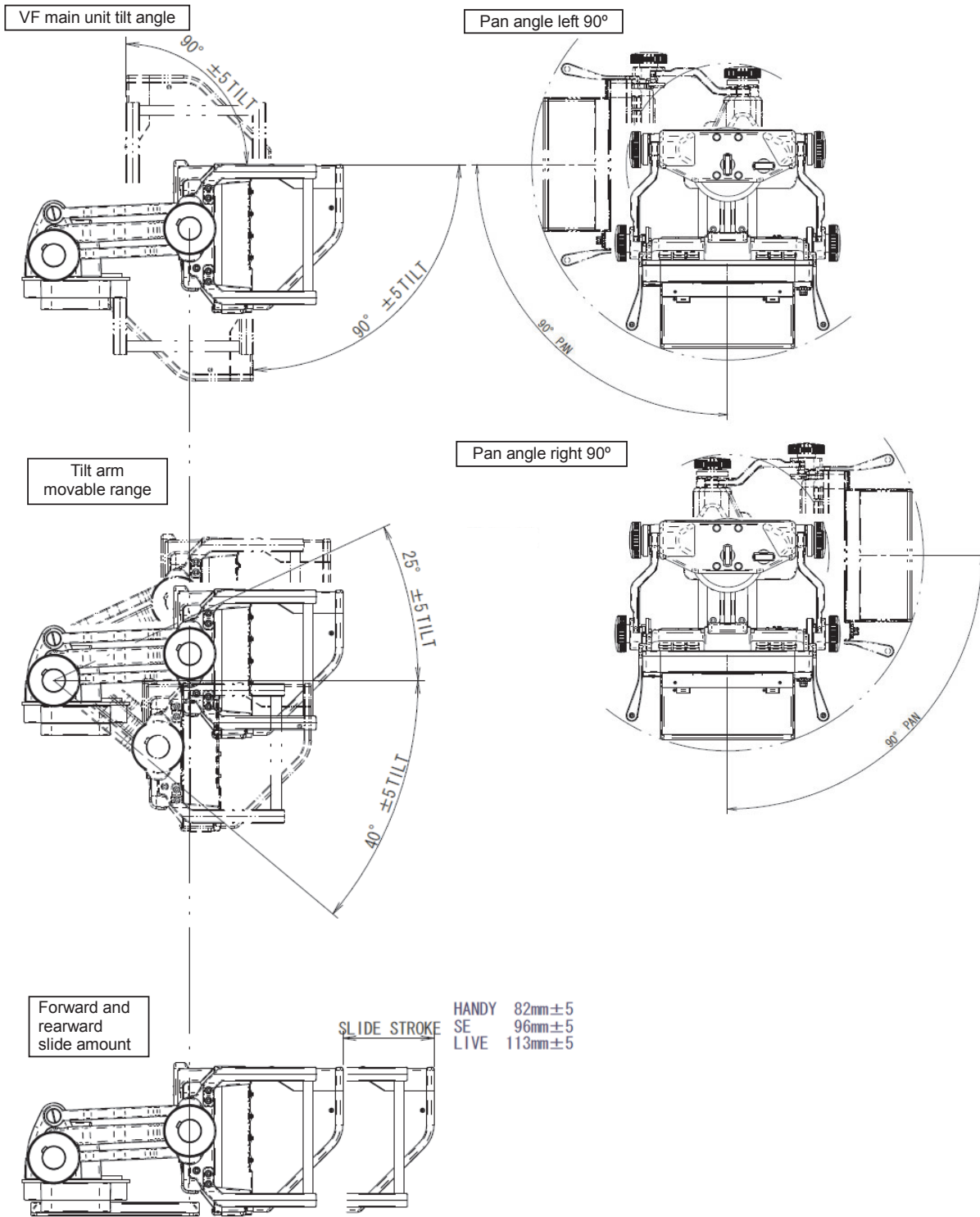


2-4. Construction of the mounting bracket



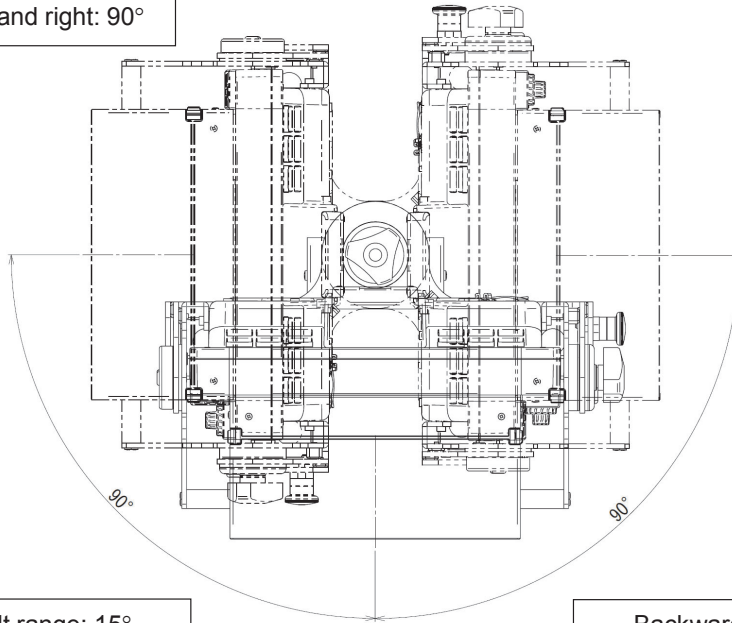
2-5. Movable range of the mounting bracket

(1) Movable range of the mounting bracket (XVF741D-021)

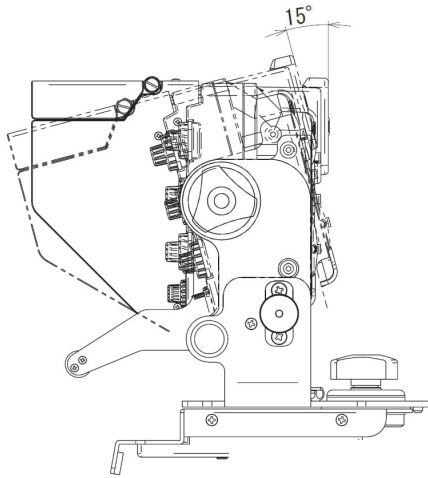


(2) Movable range of the mounting bracket (XVF701D-018)

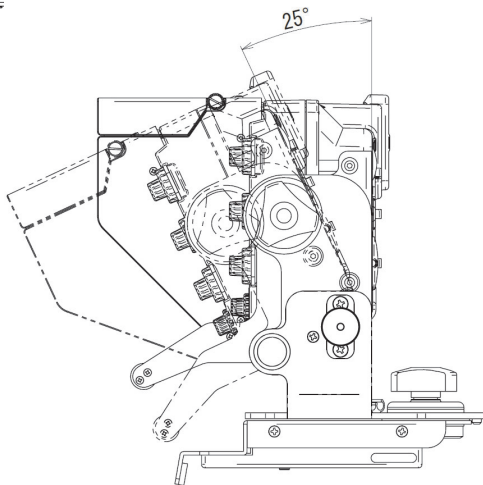
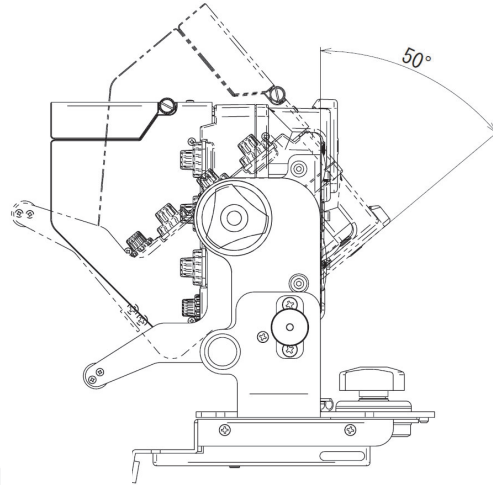
Pan angle left and right: 90°



Frontward tilt range: 15°



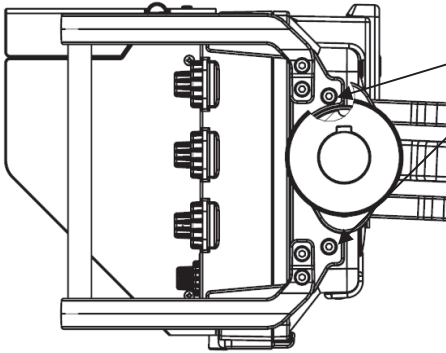
Backward tilt range: 50°



Frontward tilt range of arm: 25°

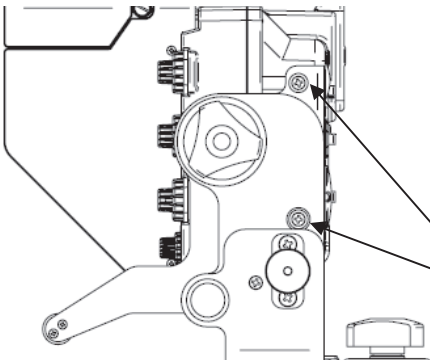
2-6. How to remove the mounting bracket

(1) How to remove the mounting bracket (XVF741D-021)



Remove the 4 setscrews on both side of the VF main unit to remove the main unit. At this time be sure to hold the VF main unit securely to prevent it from dropping.

(2) How to remove the mounting bracket (XVF701D-018)



Remove the 4 setscrews on both side of the VF main unit to remove the main unit. At this time be sure to hold the VF main unit securely to prevent it from dropping.

3. Menu Function

3-1. Menu List

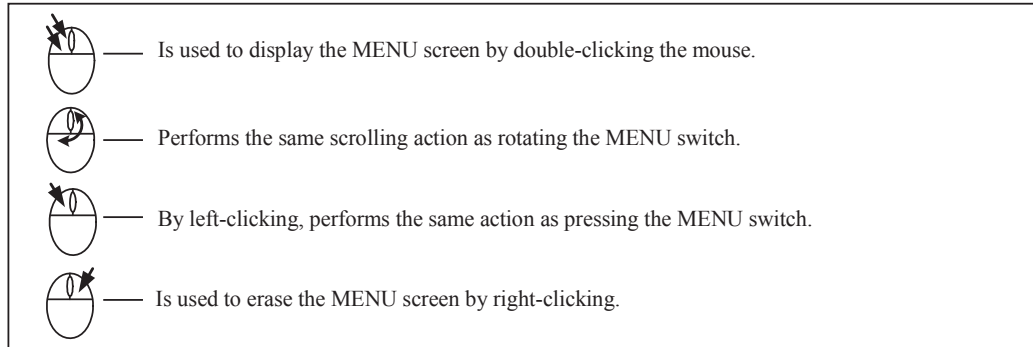
VF MENU	MENU(1/10) (TOP MENU)	1.ASSIGN F1	Function allocation setting of F1 FUNCTION Switch
		2.ASSIGN F2	Function allocation setting of F2 FUNCTION Switch
		3.ASSIGN F3	Function allocation setting of F3 FUNCTION Switch
		4.ASSIGN F4	Function allocation setting of F4 FUNCTION Switch
		5.VOLUME INDICATOR	ON/OFF setting of the indication of MANUAL volume indicator
		6.ZOOM INDICATOR	ON/OFF setting of the indication of zoom indicator
		7.SCREEN SAVER →TIMER	ON/OFF setting of the screen saver function Time duration setting until the screen saver starts operation
	MENU(2/10) (VF SETTING)	1.VOLUME PRESET	ON/OFF setting of VOLUME PRESET
		→CONTRAST	Setting of CONTRAST PRESET value
		→BRIGHT	Setting of BRIGHT PRESET value
		2.H POSITION	Setting of horizontal direction position
		3.V POSITION	Setting of vertical direction position
		4.BACKLIGHT DIMMER	Setting for Backlight brightness
		5.GAMMA SELECT	Settings of gamma 1.4/1.8/2.2/2.6/3.0
		6.RGB/YPbPr	RGB/YPbPr Switchover setting for camera input signals
	MENU(3/10) (VIDEO SETTING)	7.COLOR/MONO	Setting of COLOR/MONO switching
		8.ZEBRA	ON/OFF setting of ZEBRA
		1.VIDEO SOURCE	Setting of Input Source for main screen
		2.VIDEO MAG.	ON/OFF setting of screen magnification function
		→MAG. POSITION	Setting of video magnification position
→MAG. RATIO		Setting of magnification ratio	
→MAG. TIMER		Timer setting of video magnification function	
3.P in P		ON/OFF setting of Picture in Picture	
MENU(4/10) (LED/TALLY/BATTERY)	4.SUB DISP. POSI	Setting of SUB DISPLAY POSITION for item 2 and 3	
	5.VIDEO CAPTURE	Execution of capturing input video	
	→CAPTURE DISPLAY	ON/OFF setting of display of captured video	
	→DISP. INTERVAL	Setting of switching interval of captured video	
	1.FRONT TALLY	ON/OFF setting of the brightness and indication of the front tally	
	2.TALLY DIMMER	LED brightness setting of the front tally	
MENU(5/10) (PEAKING)	→TALLY MODE	Display combination setting of the front tally	
	3.< > LED MODE	Setting of lighting control for < > LED	
	4.BEZEL LED	Setting of lighting control for EXT / EFF / GAIN / < > LEDs	
	5.CAMERA No.	Camera No. setting of the front tally	
	6.BATTERY TYPE	Setting for Battery Type to be used for external DC input	
	1.PEAKING	ON/OFF Setting of PEAKING	
	→PEAKING MODE	Setting of PEAKING edge direction	
	→PEAKING WIDTH	Setting of PEAKING edge width	
	→NOISE SUP.	Setting of coring level in PEAKING	
	→PEAKING UP	Settings of x2 / x4 / x8 of PEAKING amount	
→COLOR PEAKING	Function to color PEAKING edges		
2.ZOOMUP PEAKING	ON/OFF setting of ZOOMUP PEAKING		
→ZOOMUP PEAK MAX	Telephoto end max. value of ZOOMUP PEAKING		
→ZOOMUP PEAK MIN	Wide-angle end min. value of ZOOMUP PEAKING		

MENU(6/10) (MARKER)	1.MARKER	ON/OFF setting of display of MARKER	
	→MARKER SELECT	Setting of marker type	
	→ASPECT MARKER	Setting of aspect market type	
	→SAFETY MARKER	Setting of safety marker in “80% to 100% (on 1% basis)”	
	→SHADOW MODE	Setting of shadow display mode	
	→SHADOW LEVEL	Setting of shadow level	
	2.CENTER MARKER	ON/OFF setting of display of center marker	
	3.MARKER COLOR	Setting of marker display color	
	4.MARKER LEVEL	Setting of marker display level	
	MENU(7/10) (USER MARKER)	1.USER MARKER	ON/OFF setting of display of user marker
2.MARKER LEVEL		Setting of user marker display level	
3.SCENE SELECT		Setting of 5 types of scenes	
→RESET SCENEx		Execution of resetting the setting scene display	
<SCENEx>		Display of currently selected scene number	
MRK1: OFF <input type="checkbox"/> ····		Setting of display/color/execution of user marker 1	
MRK2: OFF <input type="checkbox"/> ····		Setting of display/color/execution of user marker 2	
MRK3: OFF <input type="checkbox"/> ····		Setting of display/color/execution of user marker 3	
MRK4: OFF <input type="checkbox"/> ····		Setting of display/color/execution of user marker 4	
MRK5: OFF <input type="checkbox"/> ····		Setting of display/color/execution of user marker 5	
MRK6: OFF <input type="checkbox"/> ····		Setting of display/color/execution of user marker 6	
MENU(8/10) (WFM/VSC)		1.WAVE FORM	ON/OFF setting of waveform monitor display
		→DIMMER	Brightness setting of waveform monitor
	→SIZE	Display size setting of waveform monitor	
	→POSITION	Display position (R/ML) setting of waveform monitor	
	→COLOR	Display color (W/G) setting of waveform monitor	
	2.VECTOR SCOPE	ON/OFF setting of vector scope display	
	→DIMMER	Brightness setting of vector scope	
	→MAGNIFICATION	Magnification (x1/2/4/8) setting of vector scope	
	→SCALE	Scale display (75%/100%) setting of color box	
	→POSITION	Display position (R/ML) of vector scope	
	→COLOR	Display color (W/G) setting of vector scope	
	MENU(9/10) (USB MEMORY)	<VFL701A→USB MEMORY> : Menu for data writing from VF to USB memory	
		1.SAVE STATUS	Execution of writing of various VF settings to USB memory
2.SAVE USERMARKER ALL		Execution of writing of user marker to USB memory	
3.SAVE CAPTURE		Execution of writing of capture image to USB memory	
<USB MEMORY→VFL701A> : Menu for download from USB memory to VF			
4.LOAD STATUS		Download of various settings stored in USB memory to VF	
5.LOAD USER MARKER ALL		Download of user marker stored in USB memory to VF	
6.LOAD CAPTURE		Download of capture image stored in USB memory to VF	
MENU(10/10) (INFO/UPDATE)	1.MPU VERSION	MPU version display	
	2.FPGA VERSION	FPGA version display	
	3.H/W VERSION	Hardware version display	
	4.WORKING TIME	Working time display	
	5.UPDATE	Execution of update from USB memory	
	<input type="checkbox"/> MPU VERSION	Execution of MPU update from USB memory	
	<input type="checkbox"/> FPGA VERSION	Execution of FPGA update from USB memory	
6.LOAD FACTORY	Returning of the setting data to the factory setting and execution of the initialization		

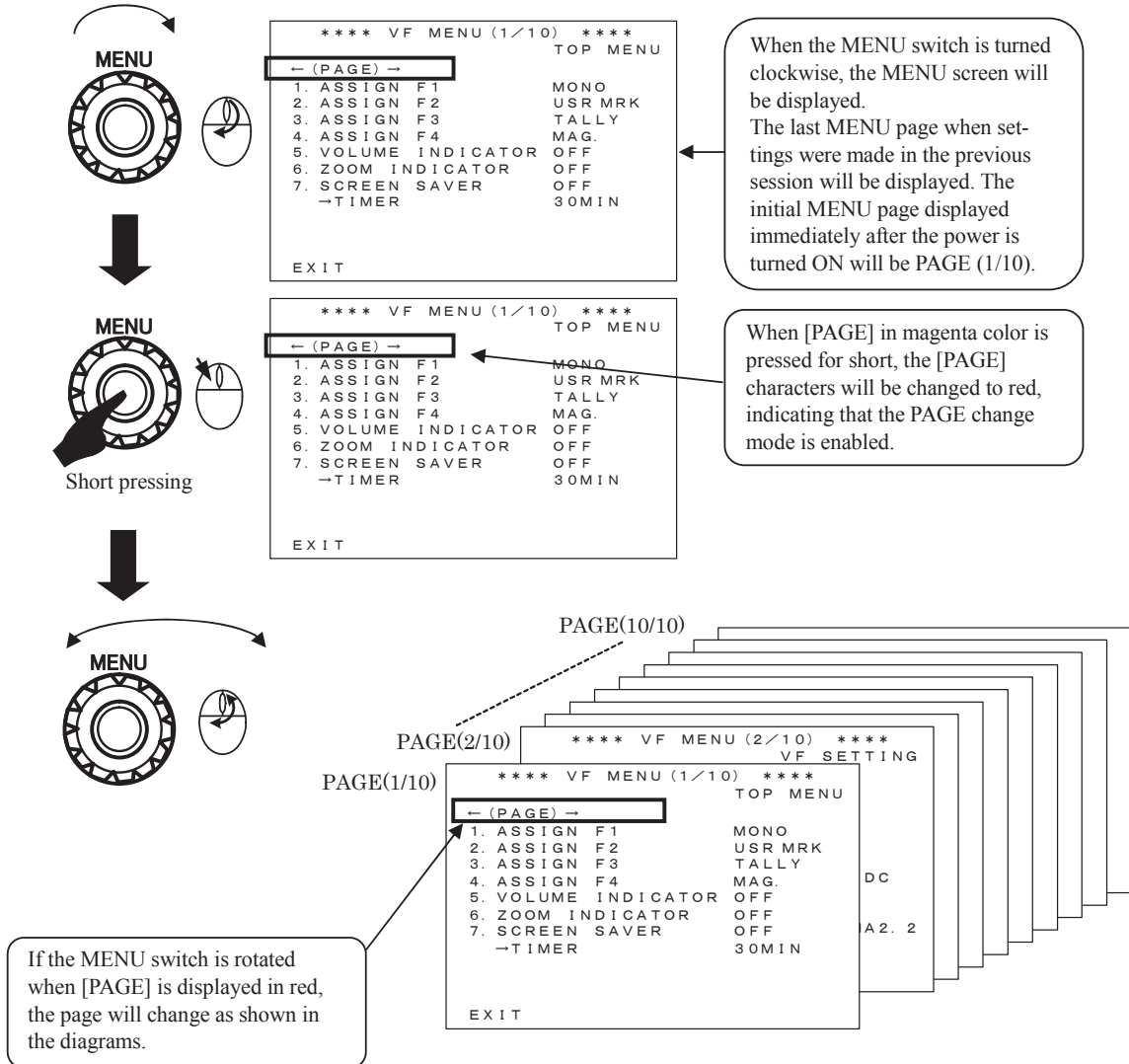
3-2. How to operate and the functional descriptions of menus (VF MENU)

◆ Basic operations of the menu switch

The MENU operation can be performed also by using a USB mouse in addition to the MENU switches. The diagram below shows the mouse operations described in this document.

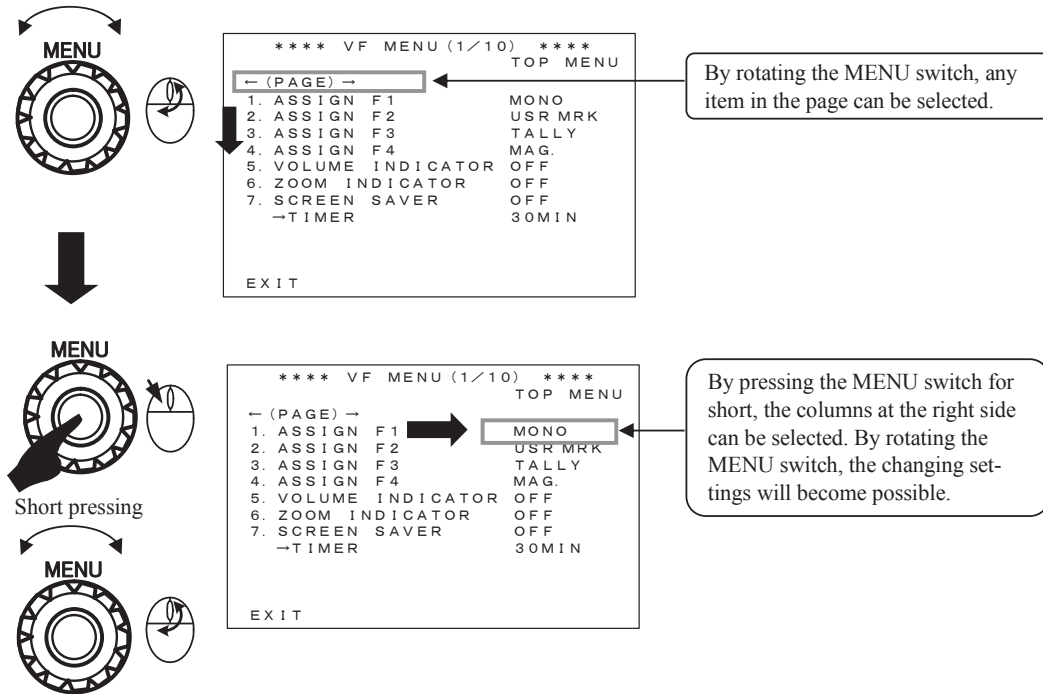


① Changing MENU pages



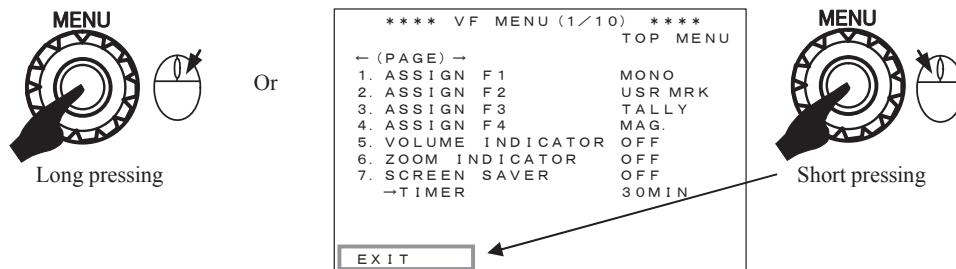
② Setting the MENU

When characters of [PAGE] are displayed in red after the MENU screen display has started, pressing the MENU switch will cause the color of [PAGE] to turn to magenta. This indicates that the setting mode within the page is enabled, permitting changes to be made.



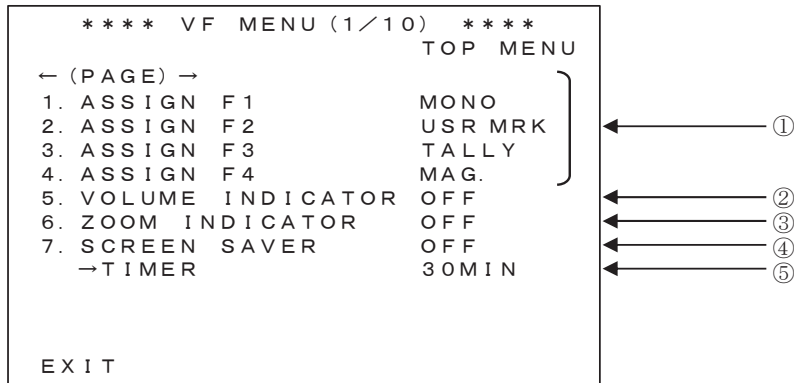
③ Turning OFF the MENU screen

To erase the MENU, press the MENU switch for long or by press [EXIT] for short.



(#) While a User Marker is being drawn, even when the MENU switch is rotated, MENU is not displayed, describing the User Marker can be performed.

(1) MENU (1/10): TOP MENU



① ASSIGN F1~F2

Sets up the various functions to be assigned to Function Switches F1 to F4.

◆Items that can be set up:

- CAPTUER: Image capturing operation
- P-IN-P:ON/OFF switchover of P in P function
- CPT-DISP: ON/OFF switchover of CAPTURE operation
- GAMMA: Switchover of GAMMA setting value
- MAG:ON/OFF switchover of Video MAG. function
- MARKER: ON/OFF switchover of marker
- MONO: COLOR/MONO switchover of display
- NOISESUP: Switchover of Coring levels
- PEAKING: ON/OFF switchover of PEAKING
- PEAK-UP: Switchover of PEAKING magnification
- SCENE: Switchover of individual scenes of user marker
- SDI: ON/OFF switchover of SDI input
- TALLY: OFF/LOW/HIGH setting of Front Tally
- USRMRK: ON/OFF switchover of USER MARKER display
- VSC: ON/OFF switchover of Vector Scope display
- WFM: ON/OFF switchover of WFM display
- ZM-PEAK: ON/OFF switchover of ZOOMUP PEAKING

② VOLUME INDICATOR

Sets up ON/OFF of the manual volume indicator display. When adjusting the PEAK, CONT, or BRIGHT volume at the right of the front on the MANUAL side, the setting level is displayed by the VOLUME INDICATOR on the Display.

③ ZOOM INDICATOR

Sets up ON/OFF of the camera zoom position indicator display.

④ SCREEN SAVER

The screen can be automatically turned off under the following conditions in order to protect the LCD panel from deterioration: no operation is conducted for a period set in item ⑤, and there is no change in the input video signal. In this section, this function is set ON/OFF.

After activation, the screen saver function can be cancelled when the POWER switch is operated or when the tally is illuminated by the control system. Then the video display restarts. The screen saver function is not cancelled with moving video.

While the screen saver function is working, the POWER LED blinks.

After cancelling the screen saver function, it may take a moment to stabilize the screen brightness.

The default value is "OFF".

⑤ TIMER

When the screen saver is set to ON in item ④, it sets the time required to start the screen saver function.

When there is no VF operation and when the same still picture is continuously displayed for the duration set here, the screen automatically turns off.

The set values of the timer are "5MIN", "10MIN", "15MIN", "30MIN", and "60MIN".

The default value is "30MIN".

(2) VF MENU (2/10): VF SETTING

**** VF MENU (2/10) ****		
VF SETTING		
← (PAGE) →		
1. VOLUME PRESET	OFF	①
→CONTRAST	0	②
→BRIGHT	0	③
2. H POSITION	0	④
3. V POSITION	0	⑤
4. BACKLIGHT DIMMER	8	⑥
5. GAMMA SELECT	GAMMA2. 2	⑦
6. RGB/YPbPr	RGB	⑧
7. COLOR/NONO	COLOR	⑨
8. ZEBRA	OFF	⑩
EXIT		

① VOLUME PRESET

“CONTRAST” and “BRIGHT” are set on the setting value of ② and ③ respectively as the preset values.

The default value is “OFF”.

* Setting [PRESET] on a FUNCTION switch will enable CONTRAST and BRIGHT value.

② CONTRAST

Sets up the Contrast PRESET value.

The setting value is a value between “-10” and “+10”.

The default value is “0”.

③ BRIGHT

Sets up the Brightness PRESET value.

The setting value is a value between “-10” and “+10”.

The default value is “0”.

④ H POSITION

Sets up the adjustment of the image position for horizontal direction. The setting value is a value between “-10” and “+10”.

The default value is “0”.

⑤ V POSITION

Sets up the adjustment of the image position for vertical direction. The setting value is a value between “-10” and “+10”.

The default value is “0”.

⑥ BACKLIGHT DIMMER

Sets up the back light dimmer value. The setting value is a value between 1 and 10.

The default value is “8”.

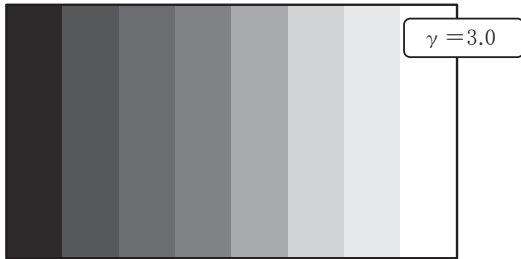
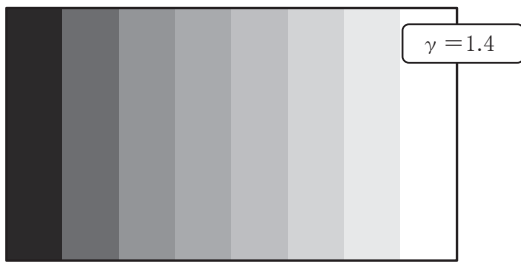
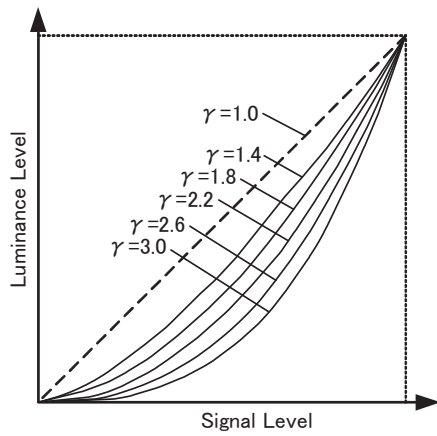
⑦ GAMMA SELECT

Sets up the Gamma value.

The normal Gamma setting is “2.2” as a standard. This is a function to increase the quality of the gradation in the dark section in images by lowering that Gamma's value to “1.4”.

By using this function, it becomes possible to support focusing operation while taking a dark scene or when focusing on a dark subject.

The default value is “GAMMA2.2”.



⑧ RGB / YPbPr

Sets up RGB /YPbPr of input signals.
 If the input signal is of RGB, “RGB” will be set up; if the signal is of YPbPr, “YPbPr” will be set up.

The default value is “RGB”.

⑨ COLOR / MONO

Sets up the COLOR/MONO display.

The default value is “COLOR”.

* Setting [MONO] on a FUNCTION switch will enable ON/OFF switchover of COLOR/MONO.

⑩ ZEBRA

Sets up ON/OFF of the ZEBRA display.

The default value is “OFF”.

* Setting [ZEBRA] on a FUNCTION switch will enable ON/OFF switchover of ZEBRA.

(3) VF MENU (3/10) VIDEO SETTING

**** VF MENU (3/10) ****		
VIDEO SETTING		
← (PAGE) →		
1. VIDEO SOURCE	CAMERA	← ①
2. VIDEO MAG.	OFF	← ②
→MAG. POSITION	CENTER	← ③
→MAG. RATIO	x 2	← ④
→MAG. TIMER	3	← ⑤
3. PinP	OFF	← ⑥
4. SUB DISP. POSI	RIGHT	← ⑦
5. VIDEO CAPTURE	EXECUTE	← ⑧
→CAPTURE DISPLAY	OFF	← ⑨
→DISP. INTERVAL	1 FRAME	← ⑩
EXIT		

① VIDEO SOURCE

This function is to select Video source for the main screen.

The setting value is "CAMERA" or "SDI".

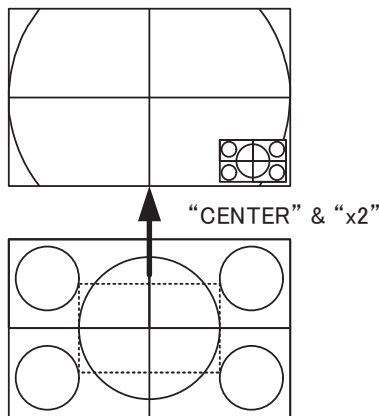
The default value is "CAMERA".

* When [SDI] is set to the FUNCTION switch, the switching between "CAMERA" and "SDI" will be possible.

② VIDEO MAG.(Magnification)

It sets ON/OFF of the screen magnification.

Video set to MAG POSITION and MAG RATIO is displayed on the entire screen, and the image of the entire video area is displayed small at the lower right corner or left (The display position can be selected on item ⑦).



The default value is "OFF".

* When [MAG] is set to the FUNCTION switch, the screen magnification function can be switched ON/OFF.

(Switching ON/OFF is only available when [MAG] is set to the FUNCTION switch.)

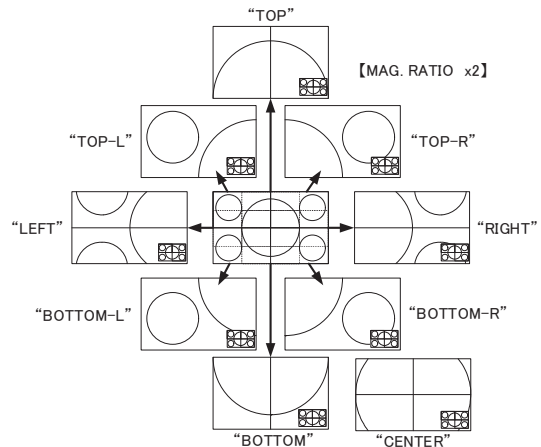
③ MAG. POSITION

It sets a position of the screen to be magnified.

The following positions are available for setting.

"CENTER", "TOP", "BOTTOM", "LEFT", "RIGHT", "TOP-L" (TOP LEFT), "TOP-R" (TOP RIGHT), "BOTTOM-L" (BOTTOM LEFT), "BOTTOM-R" (BOTTOM RIGHT).

The default value is "CENTER".



* Above figure is the figure applicable when MAG RATIO: "x2".

④ MAG. RATIO

It switches the magnification ratio of the screen.

The set values of "x2" (twofold), "x4" (fourfold), and "x8" (eightfold) are available.

The default value is "x2" (twofold).

⑤ MAG. TIMER

Sets up the timer for VIDEO MAG.

The setting is made here for specifying the length of time between the point when the display is turned ON and the point when it is automatically turned OFF.

The setting value is a value between “1sec.” and “7sec.”, and “OFF”.

If OFF is specified, the VIDEO MAG. function will always be set to the ON status.

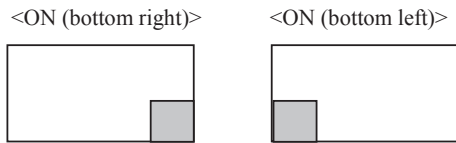
The default value is “3sec.”

⑥ P in P (Picture in Picture)

Switches ON/OFF the Picture in Picture. The set values of “OFF” and “ON” are available. In ON status, the display position (bottom right or left) of the sub-screen can be selected on the item ⑦ setting.

The default value is “OFF”.

* When [P-IN-P] is set to the FUNCTION switch, switching between ON and OFF of P in P feature will be possible.



⑦ SUB DISP. POSI

It sets the display position of the image of the entire video area regarding VIDEO MAG. function and the sub-screen regarding P in P function.

The set values of “RIGHT”(BOTTOM RIGHT) and “LEFT”(BOTTOM LEFT) are available.

The default value is “RIGHT”.

⑧ VIDEO CAPTURE

It captures the input video in the entire screen.

When EXECUTE is executed, the MENU is displayed at the lower left section of the screen. Pressing the ENT switch in this condition captures the entire screen.

When the ESC switch is pressed, it returns to the input signal.

In addition, when the setting of the Picture in Picture function of item ⑥ is ON, this VIDEO CAPTURE function cannot be available.

* When [CAPTURE] is set to the FUNCTION switch, the input video is captured in the entire screen.

⑨ CAPTURE DISPLAY

Sets up ON/OFF of the Screen Capture function.

In the mode set up under item ⑩, ON/OFF switchover of the camera image and the capture image can be performed.

No switchover operation can be performed if the format of the Capture Image and that of the Camera Image differ. Make sure that both images are of the same format for executing switchover operation.

The default value is “OFF”.

* When [CPT-DISP] is set to the FUNCTION switch, switching between the video on the camera and the captured image is conducted in the mode set in ⑩.

⑩ DISP. INTERVAL

Sets up the switchover interval between the captured image and the camera image in frame units.

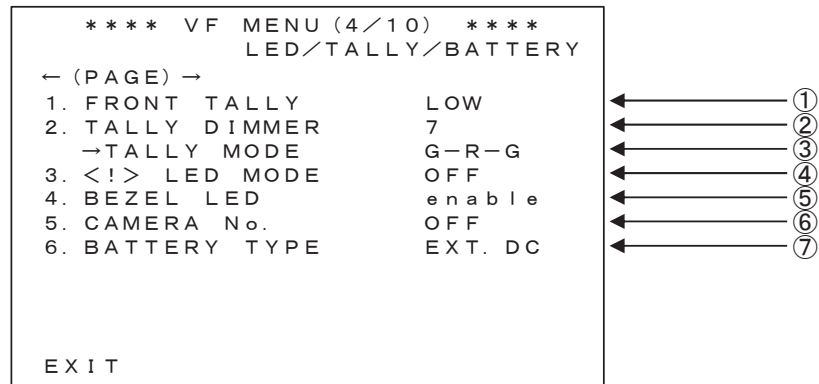
The setting values that can be selected are “1 FRAME”, “2 FRAMES”, “3 FRAMES”, “5 FRAMES”, “10 FRAMES”, “30 FRAMES”, “60FRAMES”, and “HOLD” (manual switchover).

Sets up the number of FRAMES after which switchovers will occur automatically in the case of the “FRAME” mode.

In the “HOLD” mode, manual switching is available with [CPT-DISP] set to the FUNCTION switch.

The default value is “1FRAME”.

(4) VF MENU (4/10) LED / TALLY / BATTERY



① FRONT TALLY

Sets up the brightness and OFF for the Front Tally display.
The setting can be made for LOW, HIGH, or OFF.
The default value is "LOW".

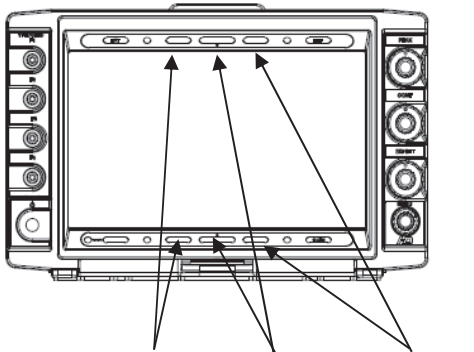
* Setting [TALLY] on a FUNCTION switch will enable switching the setting to LOW, HIGH, or OFF.

② TALLY DIMMER

Sets up the brightness of the displays of R Tally and G Tally.
The setting values that can be selected are 1~10.
The default value is "7".

③ TALLY MODE

Sets up the display positions of R Tally and G Tally.

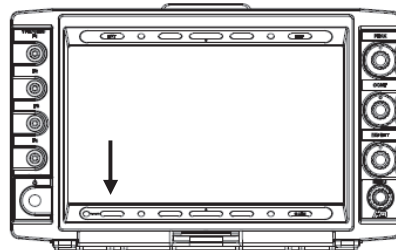


- G-R-G (G) (R) (G)
- R-G-R (R) (G) (R)
- R-R-R (R) (R) (R)

The default value is "G-R-G".

④ <!> LED MODE

Sets up the display assignment of <!> LED.

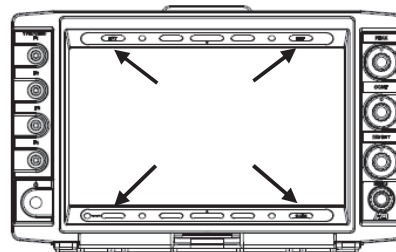


- OFF: <!> LED does not light.
- AWB OFF: Lighting turned ON when Camera AWB is OFF
- RET ON: Lighting turned ON when Camera Return is ON.

The default value is "OFF".

⑤ BEZEL LED

Sets up the lighting control of EXT / EFF / GAIN / <!> LEDs on the front bezel.

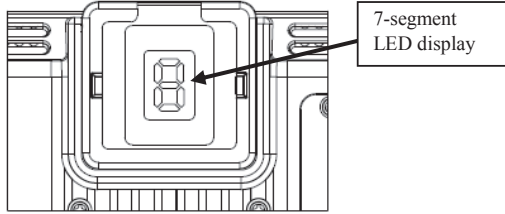


- enable: These LEDs' lighting is permitted.
- disable: These LEDs' lighting is prohibited.

The default value is "enable".

⑥ CAMERA No.

Sets up the “CAMERA No.” to be LED-displayed on the FRONT TALLY, if the “TALLY with CAMERA No. LED display” is used.



- AUTO: Acquires the [CAMERA No] from the camera side.
- 1~9: Specifies the [CAMERA No] at the VF side.
- OFF: Will not display the [CAMERA No].

The default value is “OFF”.

◆Precaution

- If this feature is used by AUTO, it will not work on a camera that has not sent the [CAMERA No] command to the viewfinder side.

⑦ BATTERY TYPE

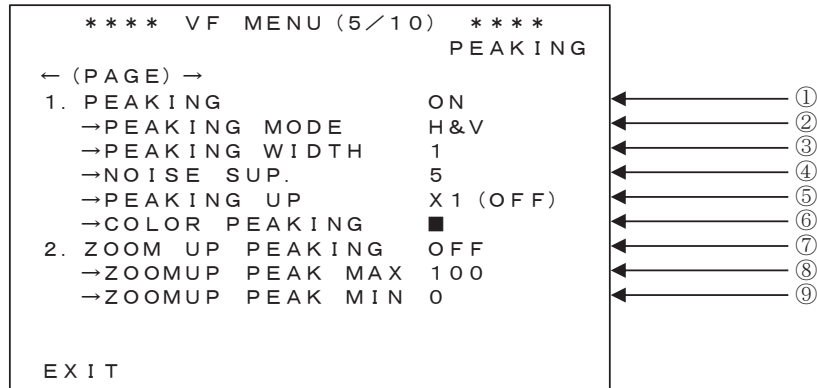
In a battery usage for the power supply, for appropriate settings of the warning display voltage and discharge termination voltage of the battery, be sure to set up the mode corresponding to the nominal voltage of the battery being employed. The setting values that can be selected are Ext. DC, DC +13.2V and DC +12V.

- EXT. DC: Stable DC power supply
- DC+13.2V: Battery with a nominal voltage of +13.2V
- DC+12V: Battery with a nominal voltage of +12V

For the nominal voltage of a battery, see the indication on the battery main unit or the Instruction Manual of the battery.

The default value is “EXT. DC”.

(5) VF MENU (5/10) PEAKING



① PEAKING

Sets up ON/OFF of PEAKING function.

The default value is "ON".

* Setting [PEAKING] on a FUNCTION switch will enable ON/OFF switchover of PEAKING.

② PEAKING MODE

This sets the directions of the Peaking edge.

"H&V": The Peaking edges are added to both the horizontal and vertical direction.

"H-ONLY": The Peaking edges are added to the horizontal direction only.

When the setting is "H&V", the peaking edge flicker may be found in the moving picture. In this case, this phenomenon will be improved by changing the setting to "H-ONLY".

The default value is "H&V".

③ PEAK WIDTH

Sets up the edge width of Peaking when Peaking is "ON".

The setting value is a value between "1" (thin) and "4" (thick).

The default value is "1".

④ NOISE SUP (NOISE SUPPRESS)

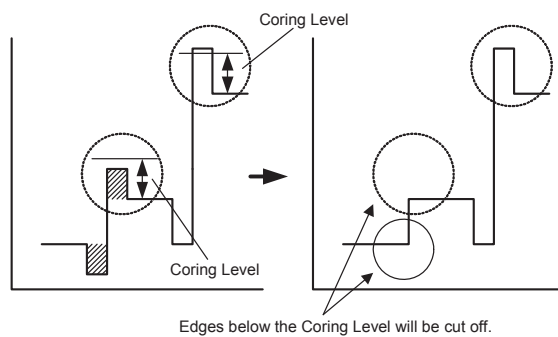
Sets up the Coring Level of Peaking when Peaking is "ON".

This is a function for cutting off the weak edges below the specified threshold value in the edge elements of images. In other words, this function eliminates the edge elements attached to the noise elements in images, allowing a clearer peaking to be realized.

It should be remembered, however, that some weak elements normally attached to the image elements will also be cut off.

The setting value is a value between "0" and "9".

The default value is "5".



Edges below the Coring Level will be cut off.

* Setting [NOISESUP] on a FUNCTION switch will enable switching of the Coring Level between "0" and "9".

* When the peaking color is set to a color other than "White" in ⑥, the NOISE SUP function does not work. The characteristic becomes the same as the set value "0".

⑤ PEAKING UP

When Peaking is "ON", sets up the magnification of the Peaking Level according to the differences in brightness. By increasing the magnification, it will become easier for peaking to attach to those portions that are difficult for edges to attach because of a small difference in brightness.

In this case, however, peaking will attach even to the noise elements in the image. Therefore, a clear peaking can be realized by using this feature in conjunction with the preceding feature described under ④ NOISE SUP.

The setting values that can be selected are "×1"(OFF), "×2", "×4", and "×8".

The default value is "×1"(OFF).

*Setting [PEAK-UP] on a FUNCTION switch will enable switching of the Peaking Magnification.

⑥ COLOR PEAKING

The color for peaking can be selected among “White”, “Yellow”, “Green”, “Red”, and “Blue”.

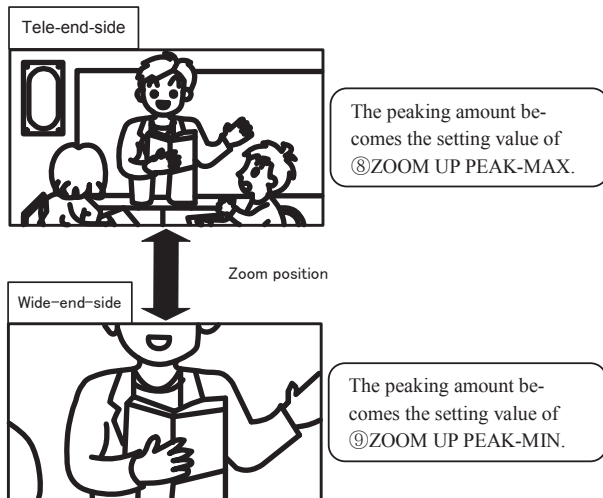
The default value is “White”.

* Functions and characteristic of the peaking color is limited by colors.

- In case the color is “White”, the variable peaking amount becomes 128 tones. In case of other colors, it becomes 64 tones. The minimum and maximum values are the same.
- When the color is other than “White”, the ④ NOISE SUP function does not work.

⑦ ZOOM UP PEAKING

When Peaking is “ON”, the ON/OFF setting for the function of varying the Peaking amount in conjunction with the zoom position of the camera is carried out here.



The default value is “OFF”.

* Setting [ZM-PEAK] on a FUNCTION switch will enable ON/OFF switchover of ZOOM UP PEAKING.

⑧ ZOOM UP PEAK MAX

When ZOOM UP PEAKING is “ON”, you can set the value of the peaking amount in the Tele-end side from the setting value in ⑨ to “100”.

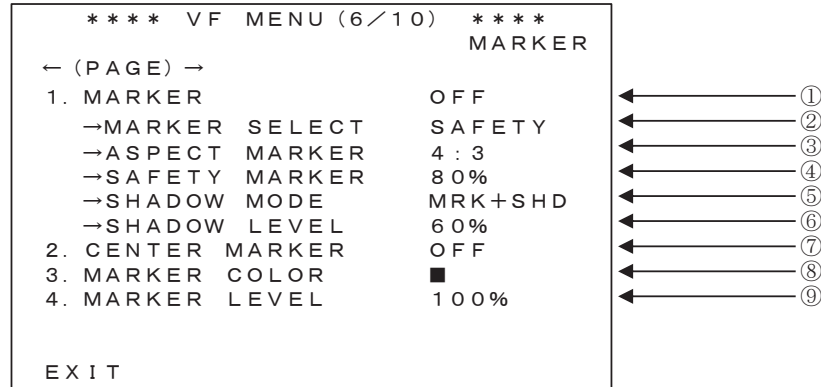
The default value is “100”.

⑨ ZOOM UP PEAK MIN

When ZOOM UP PEAKING is ON, you can set the value of the peaking amount in Wide-end side from “0” to the setting value in ⑧.

The default value is “0”.

(6) VF MENU (6/10) MARKER



① MARKER

Sets up ON/OFF of the Marker Display.

The default value is "OFF".

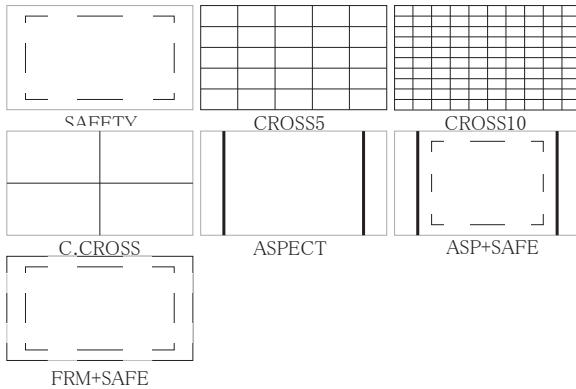
* Setting [MARKER] on a FUNCTION switch will enable ON/OFF switchover of MARKER.

② MARKER SELECT

Switches over the Marker to be displayed.

The setting values that can be selected are "SAFETY", "CROSS5", "CROSS10", "C.CROSS", "ASPECT", "ASP+SAFE", and "FRM+SAFE".

The default value is "SAFETY".

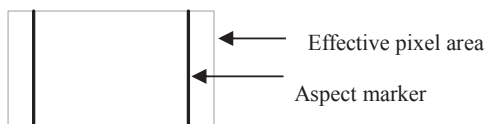


③ ASPECT MARKER

Switches over the Aspect of the Aspect Marker.

The setting values that can be selected are "4:3", "13:9", "14:9", and "15:9".

The default value is "4:3".



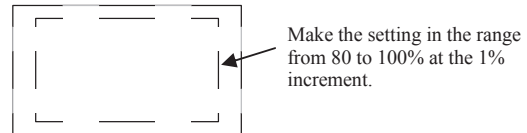
④ SAFETY MARKER

Switches the Safety Area of the Safety Marker.

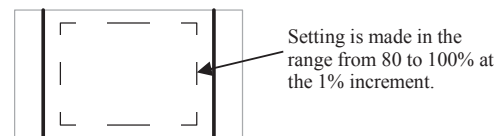
The setting values that can be selected are between "80%" and "100%" (set at the 1% increment).

The default value is "80%".

<In the case of SAFETY MARKER Display>



<In the case of SHADOW display>



⑤ SHADOW MODE

Switches the Display mode of the Aspect Marker.

The setting values that can be selected are "OFF", "SHADOW", and "MRK+SHD".

The default value is "MRK+SHD".



⑥ SHADOW LEVEL

Switches the Shadow Level of the Aspect Marker.

The setting values that can be selected are "0%" (black), "20%", "40%", and "60%".

The default value is "60%".

⑦ CENTER MARKER

“OFF”, “Type-A” (with center intersection), and “Type-B” (no center intersection) are available for the center marker indication setting.

The default value is “OFF”.



OFF

Type A

Type B

⑧ MARKER COLOR

Sets up the Marker Color.

The feature is in common with Aspect Marker, Safety Marker, Cross-hatching Marker, and Center Marker.

The setting values that can be selected are “White”, “Yellow”, “Red”, “Blue”, “Green”, “Cyan”, and “Magenta”.

The default value is “White”.

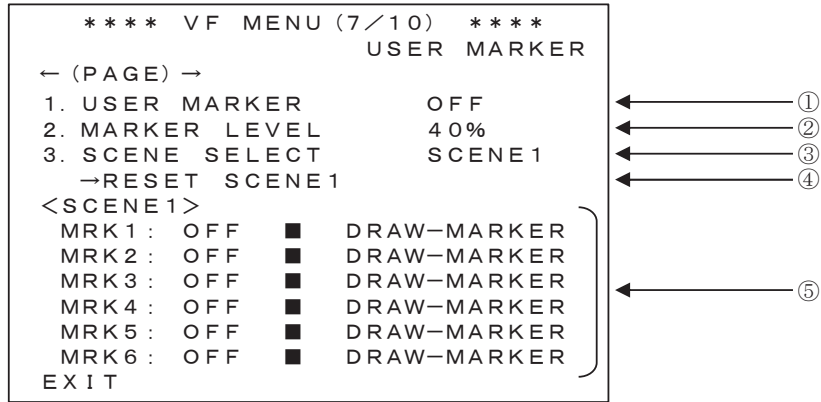
⑨ MARKER LEVEL

Switches the brightness level of Marker.

The setting values that can be selected are “20%”, “40%”, “60%”, “80%”, and “100%”.

The default value is “100%”.

(7) VF MENU (7/10) USER MARKER



① USER MARKER

Sets up ON/OFF of the USER MARKER display.
 The default value is "OFF".

* Setting [USRMRK] on a FUNCTION switch will enable ON/OFF switchover of USER MARKER.

② MARKER LEVEL

Sets up the brightness level of USER MARKER.
 The setting values that can be selected are "20%", "40%", "60%", "80%", and "100%".
 The default value is "40%".

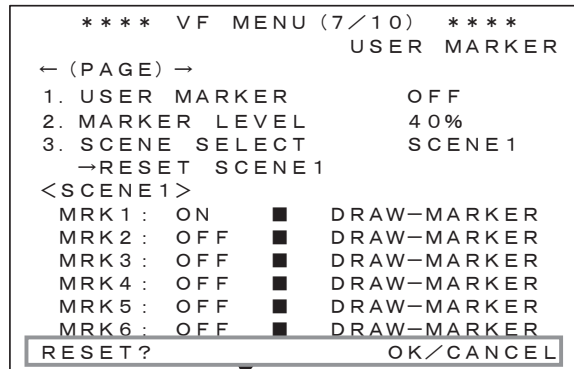
③ SCENE SELECT

Sets up the USER MARKER to be displayed from among SCENE1 through 5.
 The default value is "SCENE1".

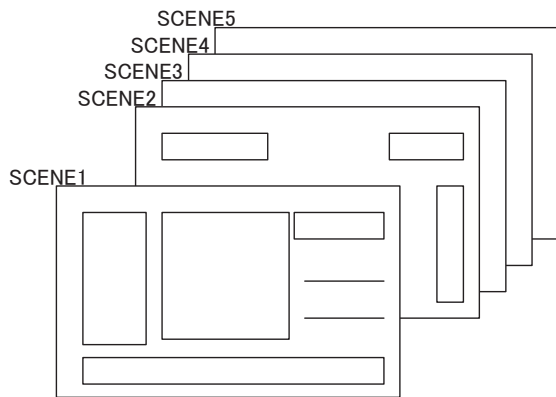
* Setting [SCENE] on a FUNCTION switch will enable switchover of individual SCENES of the USER MARKER.

④ RESET SCENE

The drawn USER MARKERS are erased by each SCENE.
 Select a SCENE to be erased in item ③ first. Then, press the MENU switch at RESET.
 At this time, a dialog message asking for a confirmation for erasing is displayed.
 At this time, selecting OK and pressing the MENU switch erase the USER MARKER of the SCENE.

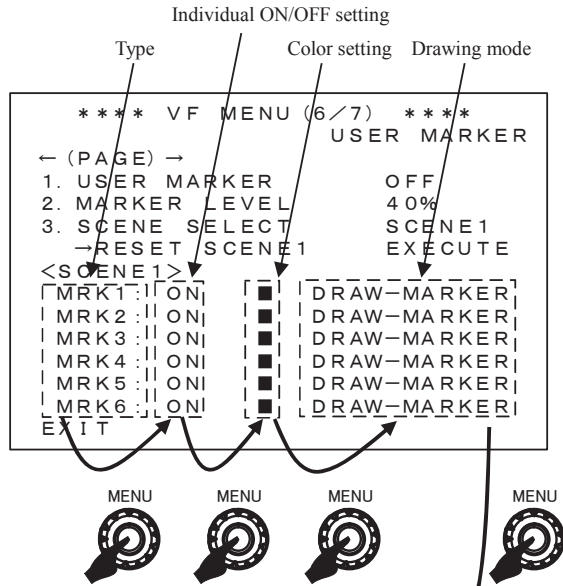


The confirmation message



⑤ MARKER1~6

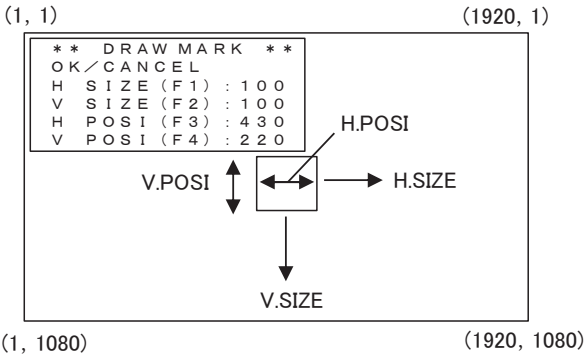
In a single scene, 6 types of User Marker can be set for making individual ON/OFF settings, display color settings (for white, yellow, cyan, green, magenta, red, and blue), and the setting for drawing.



◆USER MARKER Drawing Mode

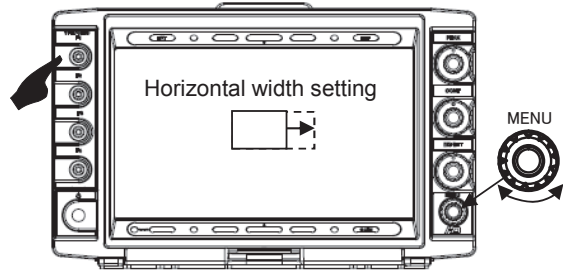
The USER MARKER drawing mode is enabled and drawing actions are performed.

Numbers indicate coordinates of pixels in 1920 × 1080.



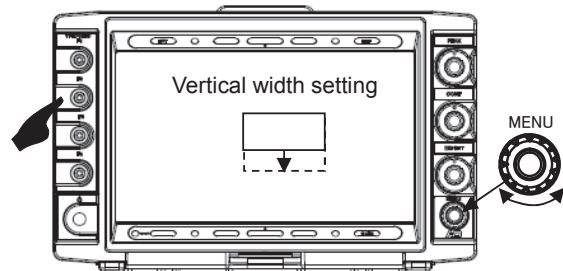
Drawing for [H.SIZE]

Horizontal width of a BOX or a LINE can be altered. In the drawing mode, pressing the F1 switch will switch the mode to the [H.SIZE] setting. The horizontal width of a BOX or a line can be altered by rotating the MENU switch while pressing the F1 switch in increments of 20 pixels.



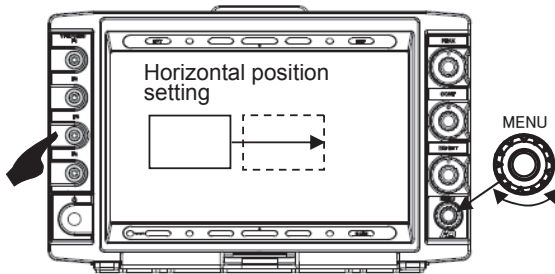
• Drawing for [V.SIZE]

Vertical width of a BOX or a LINE can be altered. If the width is set to 1, a horizontal line will be drawn. In the drawing mode, pressing the F2 switch will switch the mode to the [V.SIZE] setting. The vertical width of a BOX or a line can be altered by rotating the MENU switch while pressing the F2 switch in increments of 20 pixels.



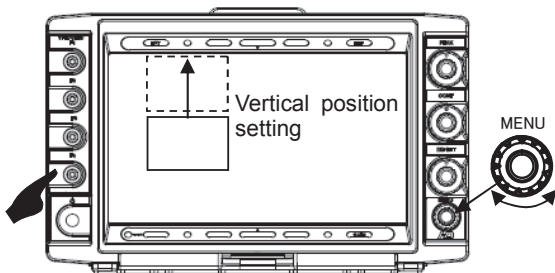
• Drawing for [H.POSI]

A BOX or LINE can be moved in the horizontal direction. In the drawing mode, pressing the F3 switch will switch the mode to the [H.POSI] setting. The horizontal position of a BOX or a LINE can be altered by rotating the MENU switch while pressing the F3 switch in increments of 20 pixels.



• Drawing for [V.POSI]

A BOX or LINE can be moved in the vertical direction. In the drawing mode, pressing the F4 switch will switch the mode to the [V.POSI] setting. The vertical position of a BOX or a LINE can be altered by rotating the MENU switch while pressing the F3 switch in increments of 20 pixels.

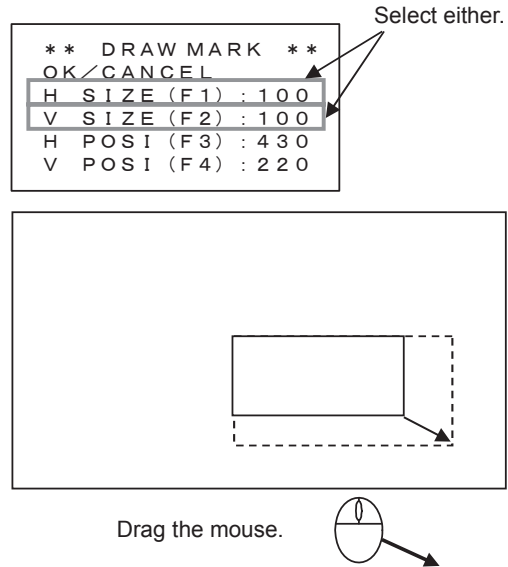


◆ Drawing by using a USB mouse

By using a USB, it is possible to draw a single pixel in a simple and a quick manner. When changing the size of an object, drawing can be performed both in the horizontal and the vertical direction simultaneously by using the mouse. Changing the position of the object can also be performed by simply dragging the mouse in the horizontal and the vertical direction.

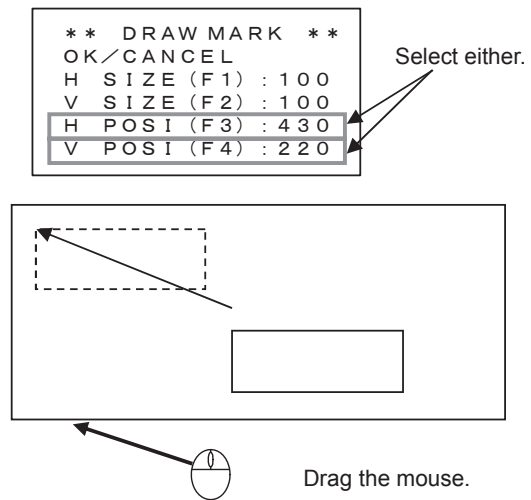
• Drawing for [H.SIZE] or [V.SIZE]

Select either [H.SIZE] or [V.SIZE], and drag the mouse to determine the size.

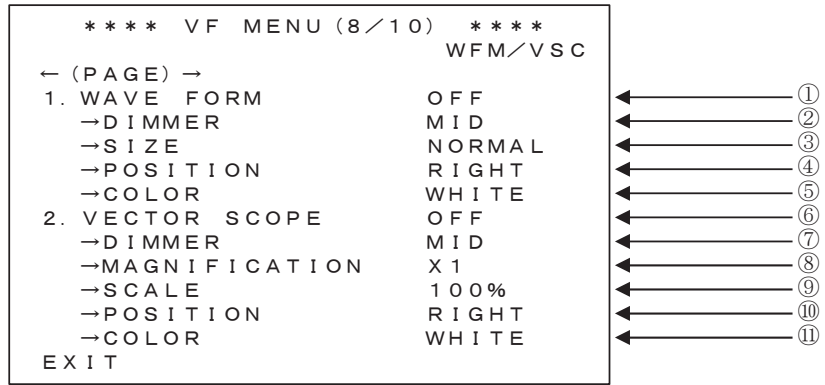


• Drawing for [H.POSI] or [V.POSI]

Select either [H.POSI] or [V.POSI], and drag the mouse to determine the position.



(8) VF MENU (8/10) WFM / VSC



① WFM FORM

Sets up ON/OFF of the Wave Form Monitor.
The default value is "OFF".

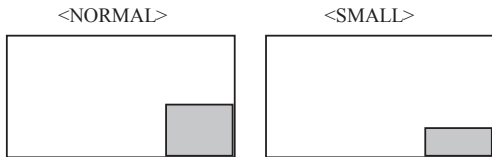
- Setting [MARKER] on a FUNCTION switch will enable ON/OFF switchover of the WFM display.

② DIMMER

Adjusts the brightness of wave form.
The setting values that can be selected are HIGH, MID, and LOW.
The default value is "MID".

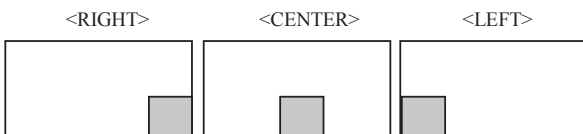
③ SIZE

Adjusts the size of the Wave Form Monitor.
The setting values that can be selected are NORMAL, and SMALL.
The default value is "NORMAL".



④ POSITION

Sets up the display Position of the Wave Form Monitor.
The setting values that can be selected are RIGHT, CENTER, and LEFT.
The default value is "RIGHT".



⑤ COLOR

Sets up the Color of the Wave Form Monitor.
The setting values that can be selected are WHITE and GREEN.
The default value is "WHITE".

⑥ VECTOR SCOPE

Turns ON/OFF the Vector Scope.
The default value is "OFF".

* Setting [VSC] on a FUNCTION switch will enable ON/OFF switchover of the Vector Scope display.

⑦ DIMMER

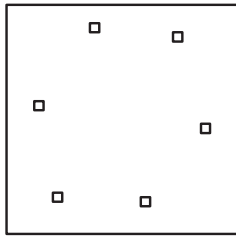
Adjusts the brightness of the Vector Scope.
The setting values that can be selected are HIGH, MID, and LOW.
The default value is "MID".

⑧ MAGNIFICATION

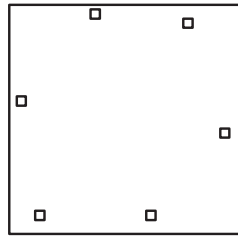
Sets up the Display Magnification of the Vector Scope.
The setting values that can be selected are X1, X2, X4, and X8.
The default value is "X1".

⑨ SCALE

Switches the COLOR BOXES of the Vector Scope.
The setting values that can be selected are 100% and 75%.
Specify 75% for the 75% color-bar signal and 100% for the 100% color-bar signal.
The default value is "100%".



75%SCALE



100%SCALE

⑩ COLOR

Specifies the Color of the Vector Scope.

The setting values that can be selected are WHITE and GREEN.

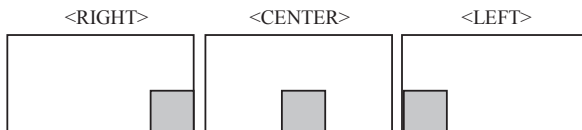
The default value is "WHITE".

⑩ POSITION

Set up the display Position of the Vector Scope.

The setting values that can be selected are RIGHT, CENTER, and LEFT.

The default value is "RIGHT".



(9) VF MENU (9/10) USB MEMORY

```

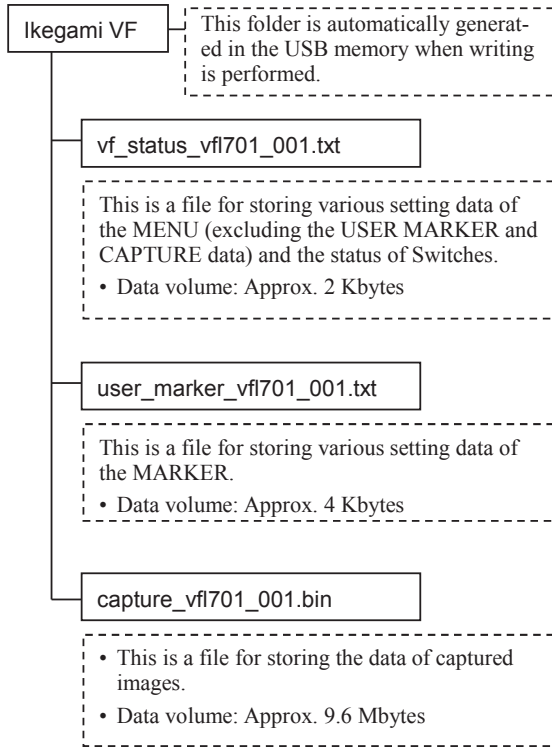
**** VF MENU (9/10) ****
                        USB MEMORY
← (PAGE) →
<VFL701A→USB MEMORY>
1. SAVE STATUS
2. SAVE USER MARKER ALL
3. SAVE CAPTURE

<USB MEMORY→VFL701A>
4. LOAD STATUS
5. LOAD USER MARKER ALL
6. LOAD CAPTURE

EXIT
    
```

Writing from VFL701A to USB Memory

◆Structure of File generated in USB MEMORY

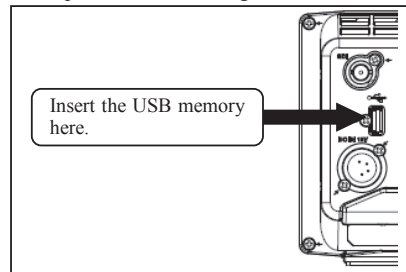


① SAVE STATUS

Writes various setting data of VFL701A to the USB MEMORY.

The time required for writing is approximately 2 seconds.

◆ The procedure of writing to the USB memory

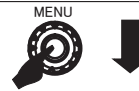


```

**** VF MENU (9/10) ****
                        USB MEMORY
← (PAGE) →
<VFL701A→USB MEMORY>
1. SAVE VF STATUS
2. SAVE USER MARKER(ALL)
3. SAVE CAPTURE IMAGE

<USB MEMORY→VFL701A>
4. LOAD VF STATUS
5. LOAD USER MARKER(ALL)
6. LOAD CAPTURE IMAGE

EXIT
    
```



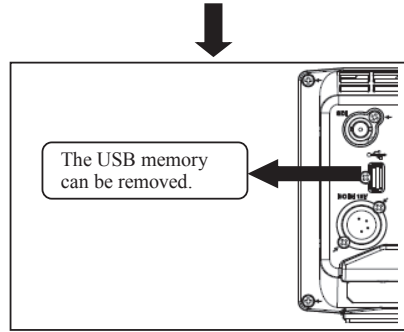
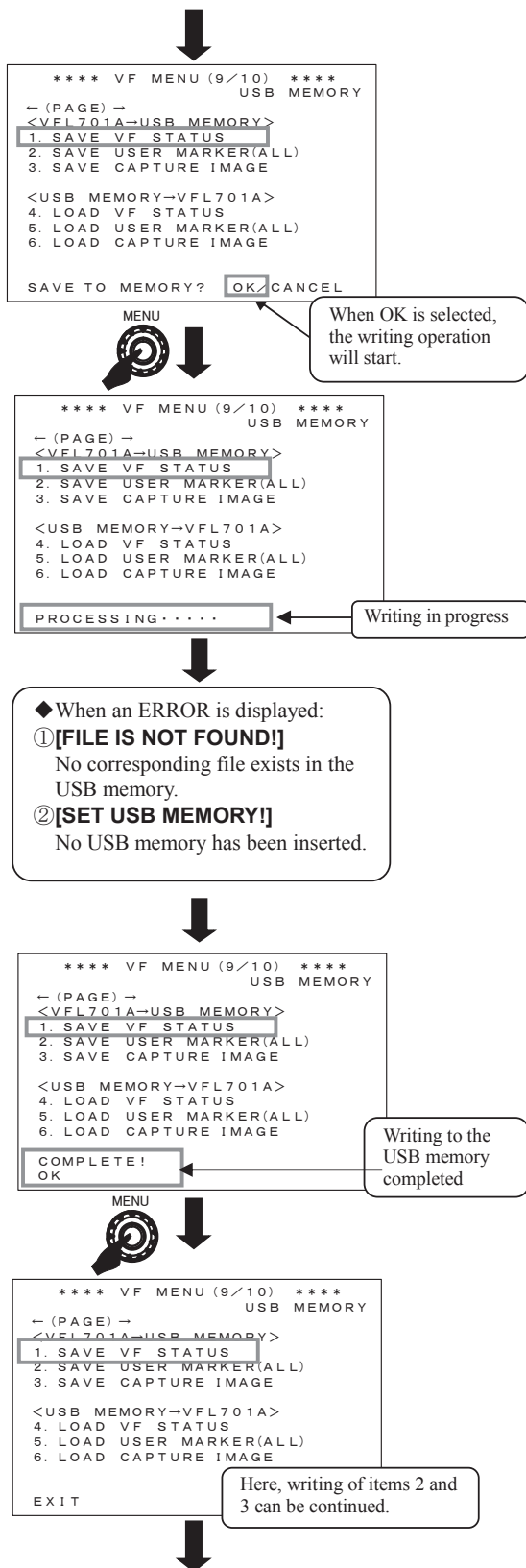
```

**** VF MENU (9/10) ****
                        USB MEMORY
← (PAGE) →
<VFL701A→USB MEMORY>
1. SAVE VF STATUS
2. SAVE USER MARKER(ALL)
3. SAVE CAPTURE IMAGE

<USB MEMORY→VFL701A>
4. LOAD VF STATUS
5. LOAD USER MARKER(ALL)
6. LOAD CAPTURE IMAGE

PROCESSING.....
    
```

Confirming loading of the memory



◆ **Precautions**

- After inserting the USB memory, do not remove the USB memory or turn OFF the power before the writing process is completed. Removal of the memory while the data is being accessed may cause damage to the memory.
- Some USB memories may not be written by the product. In this case, please try again with another USB memory.

② **SAVE USER MARKER ALL**

Writes the User Marker settings to the USB memory. The same procedure as described under item ① can be used. The time required for writing is approximately 2 seconds.

③ **SAVE CAPTURE**

Writes the captured image to the USB memory. The same procedure as described under item ① can be used. If no Image Capture function has been activated after the Power is turned ON, there is no Captured Image data existing. Therefore, an error message, **[NO CAPTURE DATA !]**, will be displayed when writing is attempted. The time required for writing will be a few minutes depending on the USB memory.

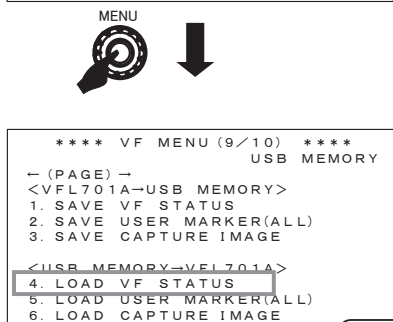
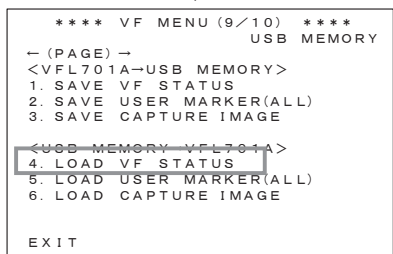
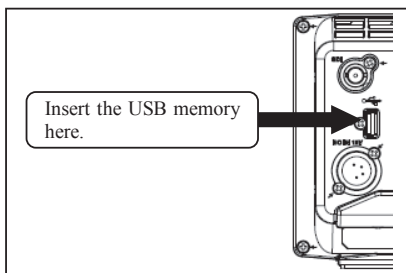
Download from USB Memory to VFL701A

④ LOAD STATUS

Downloads the data stored in the USB memory to the Viewfinder side.

The time required for downloading is approximately 2 seconds.

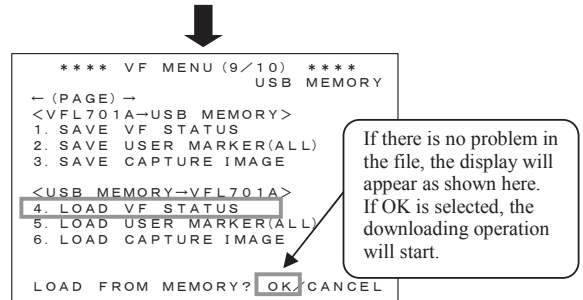
◆ Procedure for Downloading to the Viewfinder



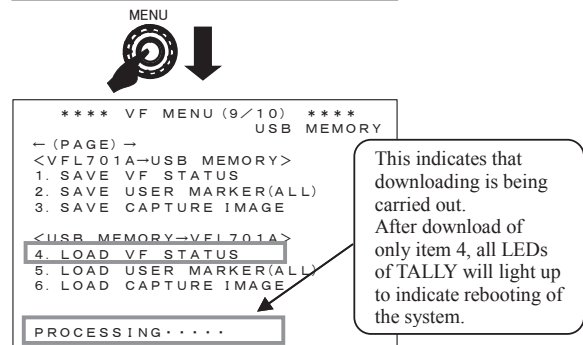
Confirming loading of the memory and the file

◆ When an ERROR is displayed:

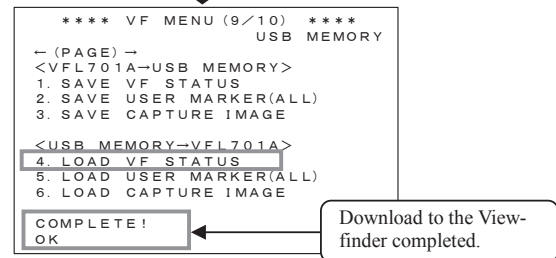
- ① **[FILE IS NOT FOUND!]**
No corresponding file exists in the USB memory.
- ② **[SET USB MEMORY!]**
No USB memory has been inserted.



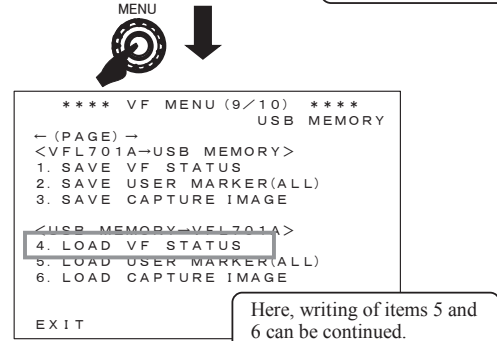
If there is no problem in the file, the display will appear as shown here. If OK is selected, the downloading operation will start.



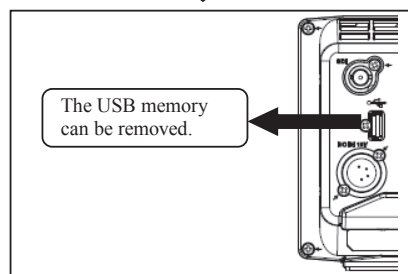
This indicates that downloading is being carried out. After download of only item 4, all LEDs of TALLY will light up to indicate rebooting of the system.



Download to the Viewfinder completed.



Here, writing of items 5 and 6 can be continued.



◆Precautions

- After inserting the USB memory, do not remove the USB memory or turn OFF the power before the download process is completed.
Removal of the memory while the data is being accessed may cause damage to the memory.
- The product may not read some USB memories. In this case, please try again with another USB memory. In order to do this trial, we recommend that you backup your data beforehand.

⑤ LOAD USER MARKER ALL

Downloads all of the User Markers stored in the USB memory to the Viewfinder.

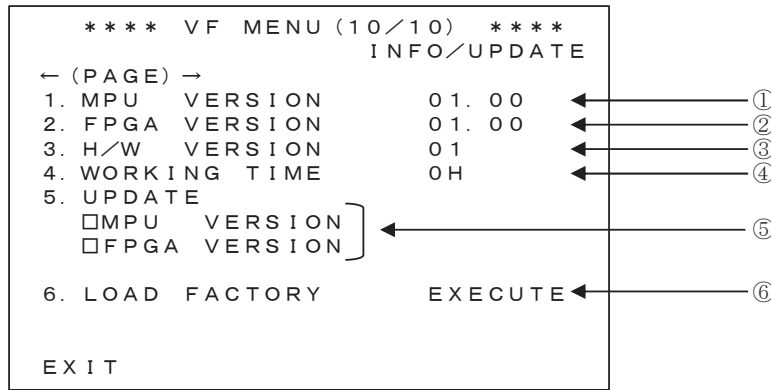
The same procedure as described under item ④ can be used. The time required for downloading is approximately 2 seconds.

⑥ LOAD CAPTURE

Downloads all of the captured images stored in the USB memory to the Viewfinder side.

The time required for downloading will be a few minutes depending on the USB memory.

(10) VF MENU (10/10) INFO / UPDATE



① MPU VERSION

Displays the MPU version.

② FPGA VERSION

Displays the FPGA version.

③ H/W VERSION

Display the Hard Ware version

④ WORKING TIME

Displays the accumulated Working Time in which the Viewfinder has been operated in increments of hours.

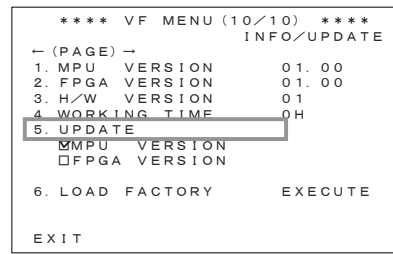
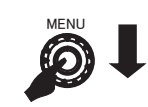
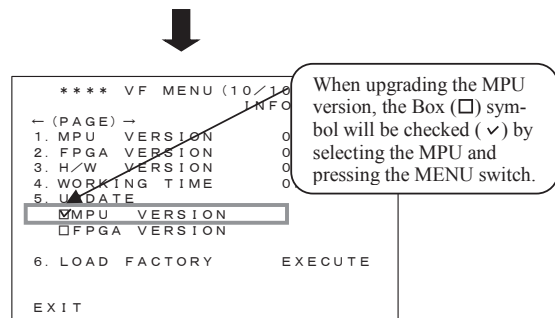
⑤ UPDATE

MPU VERSION

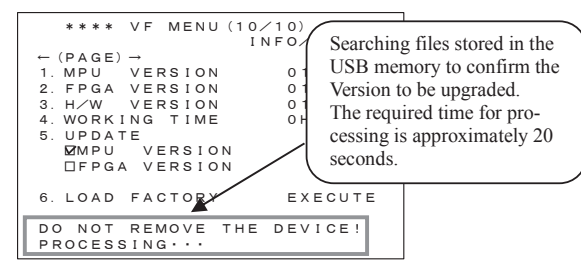
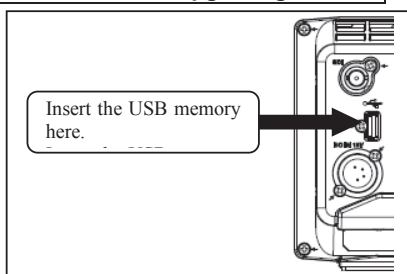
The Version will be upgraded to the MPU program stored in the USB memory.

FPGA VERSION

The Version will be upgraded to the FPGA program stored in the USB memory.



◆ Procedure for Upgrading the MPU



◆When an ERROR is displayed:

①[FILE IS NOT FOUND!]

No corresponding file exists in the USB memory.

②[SET USB MEMORY!]

No USB memory has been inserted.

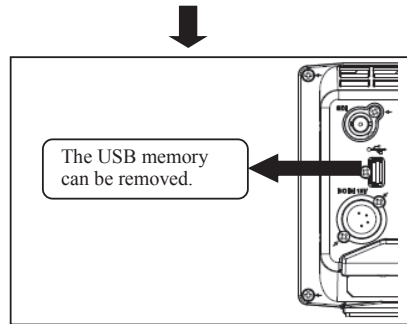
The new version detected from the USB memory will be displayed here.

If there is no problem in the file, the display will appear as shown here. If OK is selected, the downloading operation will start.

Status during UPDATE

The ongoing progress is displayed here.

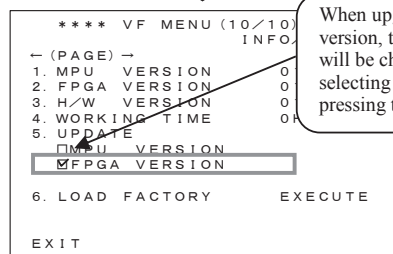
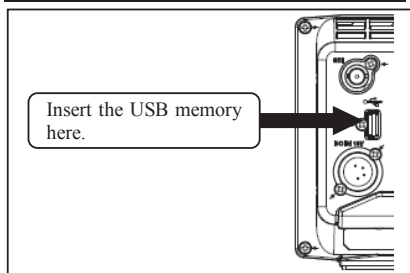
The Version Upgrade has been successfully completed.



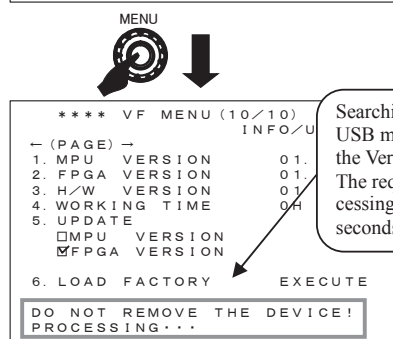
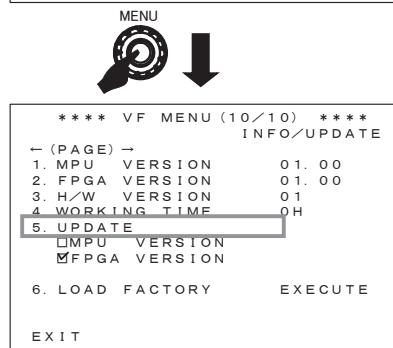
◆Precautions

- After inserting the USB memory, do not remove the USB memory or turn OFF the power before the download process is completed. Removal of the memory while the data is being accessed may cause damage to the memory.
- If the process is not terminated in the normal manner, the previous version before the version upgrade will be written, and the normal operation will be resumed.

◆Procedure for Upgrading the FPGA

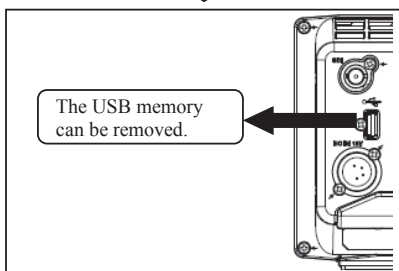
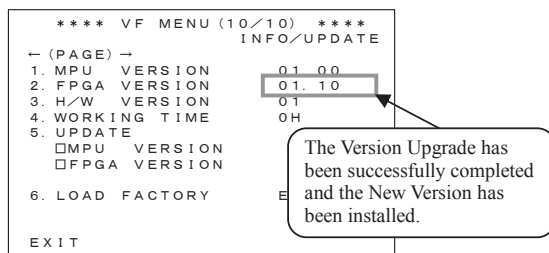
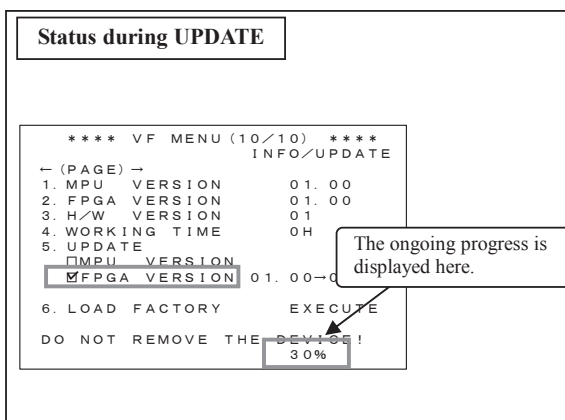
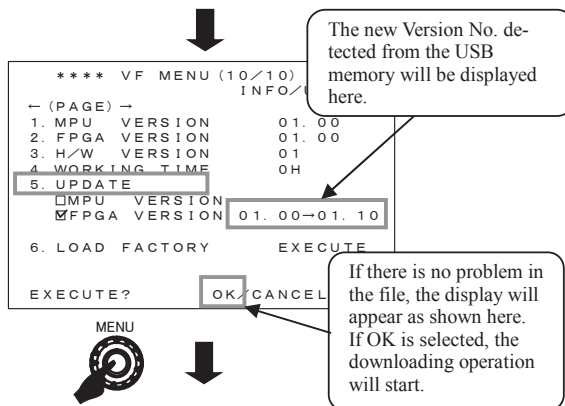


When upgrading the FPGA version, the Box (□) symbol will be checked (✓) by selecting the FPGA and pressing the MENU switch.



Searching files stored in the USB memory to confirm the Version to be upgraded. The required time for processing is approximately 5 seconds.

- ◆When an ERROR is displayed:
- ① **[FILE IS NOT FOUND!]**
No corresponding file exists in the USB memory.
 - ② **[SET USB MEMORY!]**
No USB memory has been inserted.



◆Precautions

- After inserting the USB memory, do not remove the USB memory or turn OFF the power before the download process is completed.
Removal of the memory while the data is being accessed may cause damage to the memory.
- If TALLY blinks in red, it indicates that the process has abnormally terminated. Please contact our sales agent in this case.

⑥ LOAD FACTORY

Returns all settings to the Factory Settings.

```
**** VF MENU (10/10) ****
                        INFO/UPDATE
-(PAGE) -
1. MPU VERSION      01.00
2. FPGA VERSION    01.00
3. H/W VERSION      01
4. WORKING TIME     0H
5. UPDATE
  □MPU VERSION
  □FPGA VERSION
6. LOAD FACTORY     EXECUTE
EXIT
```



```
**** VF MENU (10/10) ****
                        INFO/UPDATE
-(PAGE) -
1. MPU VERSION      01.00
2. FPGA VERSION    01.00
3. H/W VERSION      01
4. WORKING TIME     0H
5. UPDATE
  □MPU VERSION
  □FPGA VERSION
6. LOAD FACTORY     EXECUTE
EXIT
```



```
**** VF MENU (10/10) ****
                        INFO/UPDATE
-(PAGE) -
1. MPU VERSION      01.00
2. FPGA VERSION    01.00
3. H/W VERSION      01
4. WORKING TIME     0H
5. UPDATE
  □MPU VERSION
  □FPGA VERSION
6. LOAD FACTORY     EXECUTE
EXECUTE?           OK/CANCEL
```



The settings are returned to the Factory Settings.

4. Specifications

4-1. General specifications

(1) Power-supply voltage

+12 V DC (10.5~18 V)

* Supplied from camera I/F and DC IN connector

(2) Power consumption

14 W max (in all tally LEDs OFF)

(3) Operating ambient temperature/humidity: Storage ambient temperature/humidity

In operation: -10°C ~ +45°C

20% ~ 85% (non-condensing)

For storage: -20°C ~ +60°C

5% ~ 85% (non-condensing)

Maximum wet-bulb temperature: 29°C

(4) Outside dimensions

Main unit: 235 (W) × 143.5(H) × 76.5 (D) mm
(not including protrusions)

Main unit + hood + mount:

302 (W) × 148 (H) × 308 (D) mm

(D indicating the maximum size)

(5) Mass

Main unit: Approx. 1.5 kg

Main unit + studio hood + mounting bracket:

Approx. 3.7kg

(6) Accessories

Complete each set of:

- Studio hood (1)
- VF cable (1)
- Operation manual (1)
- Camera number (1-9) plate (1)

4-2. Rated performance

(1) Camera signal (Standard support)

a) Input terminal

RGB or YPbPr signal

b) Input signal format (automatic recognition)

1080i/ 59.94, 50

1080p/ 25, 23.98

1080psF/29.97, 25, 24, 23.98

720p/ 59.94, 50

c) Input level

G/Y: 1Vp-p positive polarity

B/R/(Pb/Pr): 700mVp-p positive polarity

d) Input impedance

75 Ω

(2) SDI signal (External input)

a) Input terminal

Input: BNC 1 system

b) Input signal format (automatic recognition)

3G-SDI: SMPTE425M-A/B

1080p/60, 59.94, 50

HD-SDI: SMPTE292M

1080i/60, 59.94, 50

720p/60, 59.94, 50, 30, 29.97, 25, 24, 23.98

1080psF/30, 29.97, 25, 24, 23.98

1080p/30, 29.97, 25, 24, 23.98

c) Input level

Rating: 800 mVp-p±10%

d) Transmission rate

3G-SDI: 2.970 Gb/s

HD-SDI: 1.485Gb/s

e) Quantifying bit number

10 bits

f) Input impedance

75 Ω

g) Transmission distance

100 m or more (at 5 CFB, 2.970 Gb/s)

4-3. LCD module specifications

(1) Number of pixels

1920 (H) × 1080 (V) dots

(2) Pixel pitch

0.027 (W) × 0.081 (H) mm

(3) Screen size (display area)

155.52mm × 87.48mm (Diagonal: 17.48cm)

(4) Screen brightness (Brightness performance of LCD single unit)

400cd/m²

* The brightness on individual sets may differ, depending on the color temperature setting values)

(5) Structure

a-TFT

(6) Contrast ratio

1000:1 (typ.)

(7) Number of display colors

16.77 million colors (Each of RGB at 8 bits)

5. Functions

5-1. Front operations

(1) Switches

POWER (ON/OFF switching): LED display

F1 (Assigned function: ON/OFF switching): LED display

F2 (Assigned function: ON/OFF switching): LED display

F3 (Assigned function: ON/OFF switching): LED display

F4 (Assigned function: ON/OFF switching): LED display

MENU (also used for MENU jog)

* F1 ~ F4 can be assigned with a function by MENU.

(2) Volume

PEAKING, CONTRAST, BRIGHT

5-2. Marker function

(1) Center marker

•Type-A (with center intersection point)

•Type-B (without center intersection point)

(2) Safety marker

a) Types

- Safety area marker (80% ~ 100%)
- 5 × 5 division cross-hatch
- 10 × 10 division cross-hatch
- Cross
- Aspect marker (15:9/4:9/13:9/4:3)
- Aspect marker + safety marker
- Frame marker + safety marker

b) Marker level

- Setting in 5 steps of 20%, 40%, 60%, 80% and 100%

5-3. Shadow function

Function for shadowing outside the safety marker area or the aspect marker area.

a) Types

- Various markers + shadows
- Various markers only
- Shadows only

b) Shadow contrast level

- Setting in 3 steps of 20%, 40% and 60%

5-4. User marker function

Function for the user to draw a box at any location with any size in increments of pixels.

a) Number of scenes: 5

b) Number of types of markers: 6

c) Color: 7 colors (Individual settings allowed)

d) Size allowed for drawing:

1920 (H) × 1080 (V) pixel

e) Drawing method: By using the switch or the USB mouse

* Patent registered

5-5. USB memory function

a) Memory contents

- MENU setting
- User marker
- Captured image

b) Stored image

• Resolution: 1920 × 1080

• File type: Binary files exclusively used by VF

5-6. Camera I/F connector

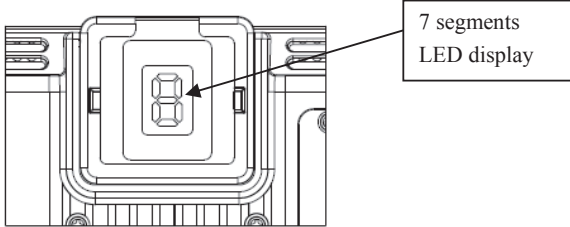
Connected to the camera via the exclusive VF cable to accommodate with all connections, including the power, video signals, and controls.

- usage connector : DX10-28S type

5-7. Optional Feature

The camera No. can be displayed on the FRONT TALLY as the optional feature.

Please contact our sales agent for more information.



6. Applicable Standards

6-1. Radio noise

- FCC Part15B Class-A
- EN55032 Class A
- EN55103-2: 2009 E4

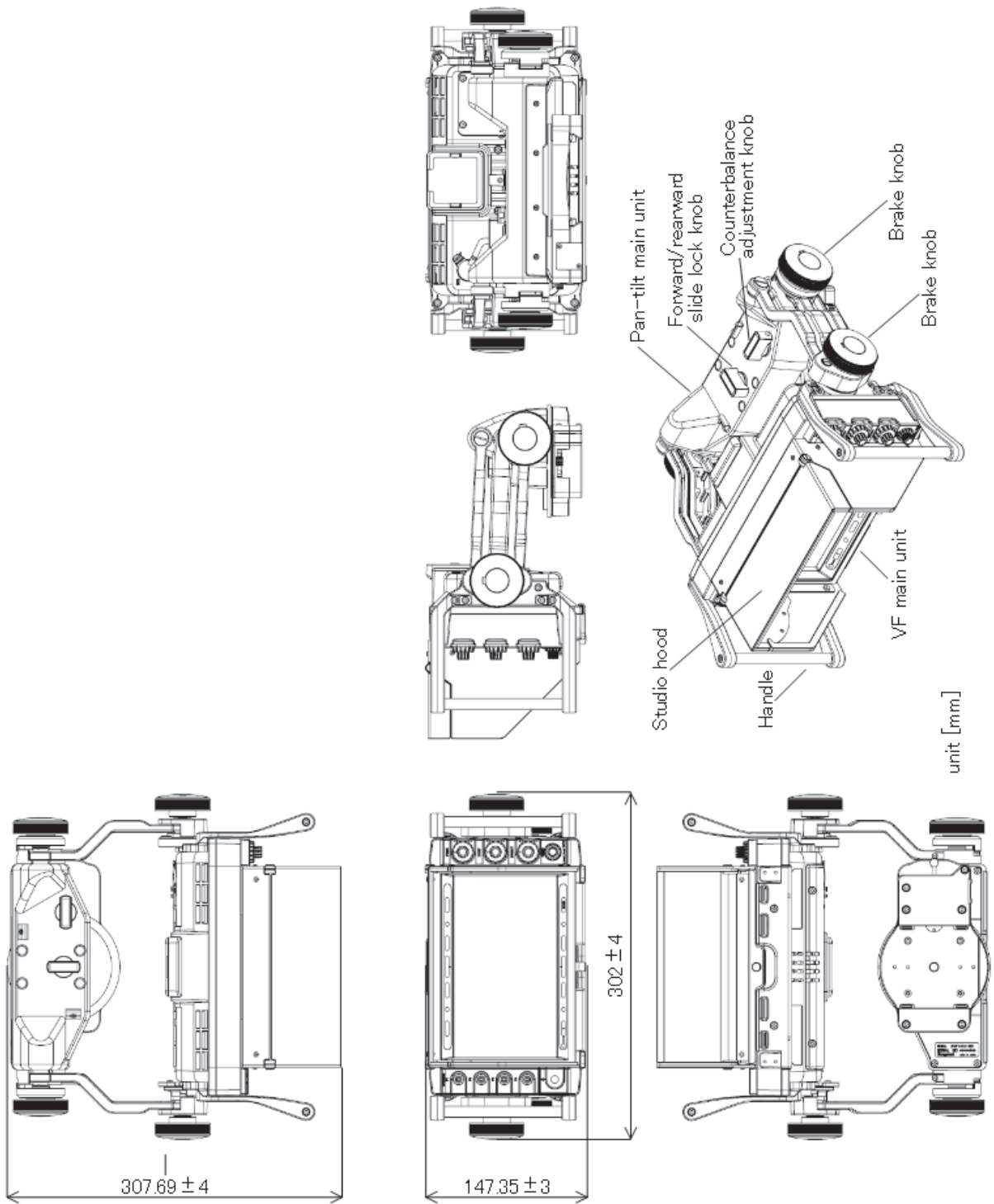
6-2. Environmental standards

Compliant with RoHS Directive

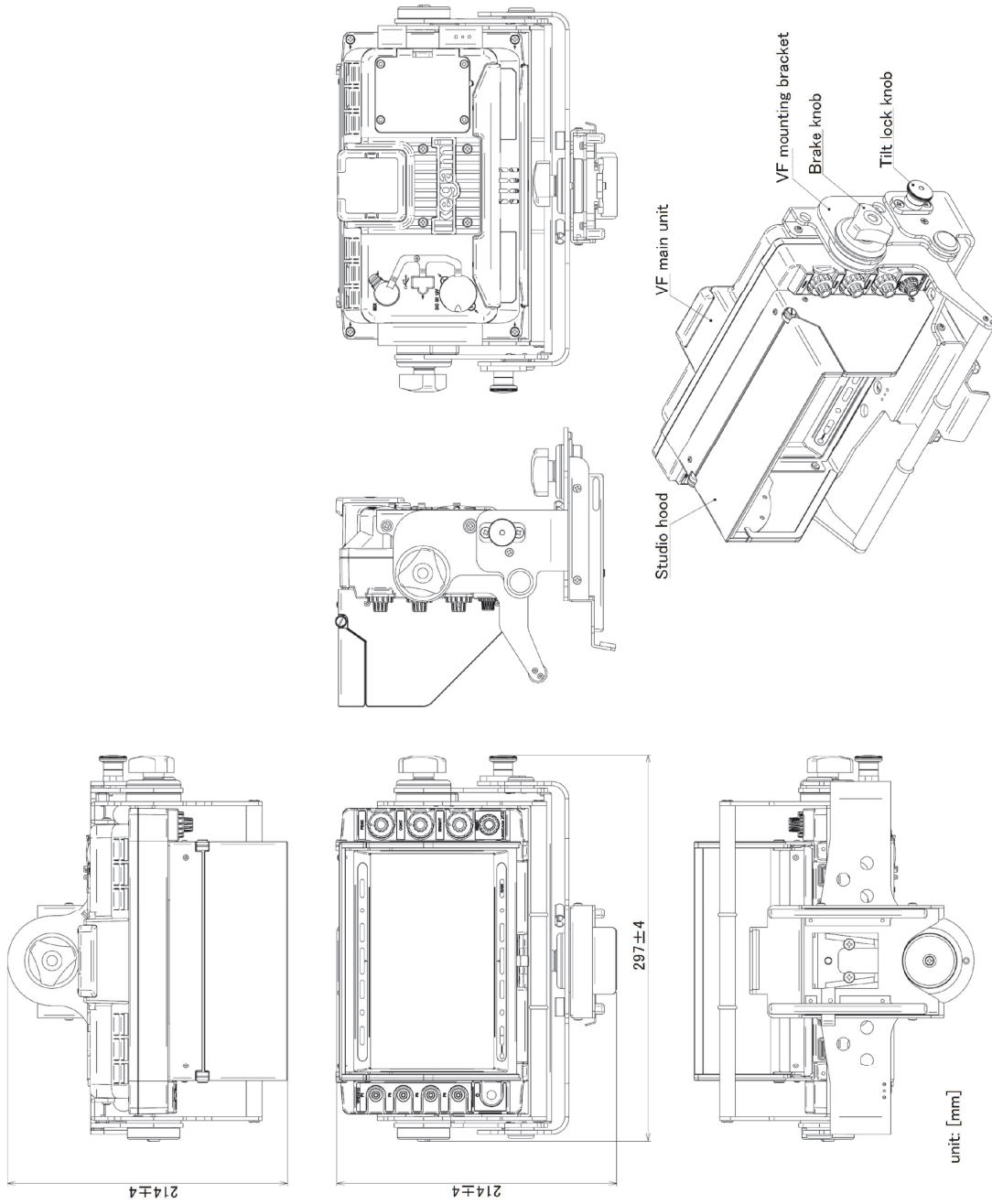
◆Precautions

- * Please understand that the specifications and the appearance of this product are subject to changes without notice for improvements.
- * Missing or bright spots may occur on this product at a rate of 0.01% or lower regarding the effective pixels. Please understand that this phenomenon is not a malfunction of the product.

(2) Main unit + studio hood + mounting bracket (XVF741D-021)



(3) Main unit (VFL701A) + studio hood + mounting bracket (XVF701D-018)



Ikegami

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HDTV LCD COLOR VIEWFINDER
オペレーションマニュアル

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